REPORT RESUMES

ED 014 304 JC 670 953

DIMENSIONS OF CHANGES IN HIGHER EDUCATION, WORKSHOP CONFERENCES TO FOSTER INNOVATION IN HIGHER EDUCATION (1ST, MAGNOLIA MANOR, MASSACHUSETTS, MAY 19-23, 1966).

BY- HAMLIN, WILL PORTER, LAWRENCE
UNION FOR RES. AND EXPERIMENTATION IN HIGHER EDUC.

REPORT NUMBER BP-6-2183-1 PUB DATE JUN 67
CONTRACT OEC-3-6-062183-0667
EDRS PRICE MF-$0.75 HC-$5.72 141P.

DESCRIPTORS- *JUNIOR COLLEGES, *HIGHER EDUCATION, *INNOVATION, *EXPERIMENTAL PROGRAMS, *EDUCATIONAL RESEARCH, RESEARCH PROJECTS, INSTRUCTIONAL INNOVATION,

THIS CONFERENCE ON EXPERIMENTATION AND INNOVATION DEALT WITH THE FOLLOWING TOPICS--(1) "EXPERIMENTAL COLLEGES IN AMERICA," AN OVERVIEW OF THE DIFFICULTIES AND DANGERS OF INNOVATION, (2) "THE EXPERIMENTAL COLLEGE AT BERKELEY," DESCRIBING A "PROBLEMS" APPROACH TO AVOID THE "DOMINATION OF... THE ACADEMIC DISCIPLINE," (3) "THE LIBRARY-COLLEGE," STRESSING INDEPENDENT STUDENT LEARNING THROUGH THE USE OF LIBRARY-CENTERED PROJECTS, (4) "JUSTIN MORRILL COLLEGE AT MICHIGAN STATE," ON CONTROLLED DECENTRALIZATION, THE LIVING-LEARNING UNIT CONCEPT, (5) "OKALHOMA CHRISTIAN COLLEGE," WITH ITS FULLY ELECTRONIC LEARNING CENTER, (6) "MATERIALS FOR BETTER LEARNING," NEW COURSES STRESSING CERTAIN CONCEPTS AS A BASIS FOR INDEPENDENT STUDY, (7) "ATTACKING THE ISSUES," WITH A RECOMMENDATION FOR STUDYING STUDENTS AND THEIR DEVELOPMENT TO FORMULATE A TRUE THEORY OF LEARNING. PARTICIPANTS IN WORKSHOPS AND PANELS DISCUSSED THESE TOPICS, EXAMINING THE DIFFICULTIES AND REWARDS OF TRYING NEW PROGRAMS AND PROCEDURES. (HH)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

ERIC

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED014304

UNIVERSITY OF CALIF.
LOS ANGELES

NOV 15 1967

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

1

dimensions of changes in higher education

JC 670953

The Union for Research and Experimentation in Higher Education is a group of ten colleges that have joined to foster research and experimentation in higher education. It seeks to influence programs of undergraduate education both within and outside of the Union colleges. Member colleges are Antioch, Bard, Goddard, Hofstra University, Monteith of Wayne State University, Nasson, Northeastern Illinois State, Sarah Lawrence, Shimer, and Stephens Colleges. Headquarters for the Union is at Antioch College, Yellow Springs, Ohio.

WORKSHOP CONFERENCES TO FOSTER INNOVATION IN HIGHER EDUCATION

("Dimensions of Change in Higher Education," the first of four Conferences on Innovation, held May 19-23, 1966, at Magnolia Manor, Massachusetts.)

Project No. 6-2183
Contract No. OEC-3-6-062183-0667

Project Director, Samuel Baskin,
President, Union for Research and
Experimentation in Higher Education

(Conference Reporter, Will Hamlin,
Goddard College; Edited by Will
Hamlin, Goddard College, and
Lawrence Porter, Antioch College)

June 1967

The conference reported herein was conducted pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Union for Research and Experimentation
in Higher Education

Headquarters: Antioch College
Yellow Springs, Ohio

Conference Survey

DIMENSIONS OF CHANGE IN HIGHER EDUCATION

The First Conference on Innovation,
held May 19-23, 1966, at Magnolia
Manor, Mass., under the auspices
of the Union for Research and
Experimentation in Higher Education.

- Table of Contents
- Conference Background
- Conference Program
- Summary of the Proceedings
- Roster of Participants

Conference Reporter, Will Hamlin

Edited by Will Hamlin, Goddard College,
and Lawrence Porter, Antioch College

TABLE OF CONTENTS

SECTION ONE: CONFERENCE SURVEY

Background of the Conference, Samuel Baskin v

Summary of the Proceedings 1

Conference Program 10

Roster of Participants 13

SECTION TWO: CONFERENCE ADDRESSES

"Experimental Colleges in America," Goodwin Watson . . . 22

Some Current Experiments: Four New Colleges and Their Programs:

"The Experimental College at Berkeley," Joseph Tussman 34

"The Library-College: Prospects for Jamestown," Dan Sillers 38

"Justin Morrill College at Michigan State," Gordon Rohman 44

"Oklahoma Christian College," Stafford North 49

"Materials for Better Learning," Franklin Patterson . . 53

"Attacking the Issues," Nevitt Sanford 58

SECTION THREE: THE SEVEN WORKSHOPS

#1 Maintaining the benefits of smallness within the large university 64

#2 Developing independent learners in a liberal arts college 69

#3 A possible redefinition of the disciplines as a way of approaching liberal education 80

#4 The small experimental liberal arts college related to an operating small college 84

#5 Educational opportunities for inner-city youth . . 88

#6 Liberal arts college libraries of the future . . . 92

#7 UREHE: Proposals for research, experimentation, and/or innovation in higher education 100

SECTION FOUR: PANEL DISCUSSIONS

"Innovation: How Does It Happen?" 104

"The Students Speak about Experimentation" 118

"Where Do We Go from Here?" 126

UREHE

The Union for Research and Experimentation in Higher Education is a consortium of ten colleges (with headquarters at Antioch College), formed in 1963 to foster educational research and experimentation. Member schools are Antioch, Bard, Goddard, Hofstra, Illinois Teachers-North, Monteith, Nasson, Sarah Lawrence, Shimer, and Stephens.

Composed of colleges committed to experimentation and research as a way of enriching, enlivening, and improving higher education, the Union exists for the purpose of searching for new ways and new programs of teaching and learning. In undertaking this search, it makes use of member schools, but also looks for ideas at other colleges and universities--in fact, wherever they are to be found. Conversely, one significant Union premise is that its activities and discoveries will have implications not merely for ten institutions, but for the entire American academic community.

BACKGROUND OF THE CONFERENCE

Some years ago, Philip Coombs, then program director of the Education Division of the Fund for the Advancement of Education, asked what would happen if every institution of higher learning had on its staff an able person whose principal task was that of encouraging the development of innovative ideas--a person who in effect served as the college's "vice president-in-charge-of-heresy."*

While more new developments have come about in higher education in the last decade than at any other time in our nation's history, the fact remains that higher education is still badly in need of a good bit of "heresy." One need only glance at the catalogues of America's colleges and universities as they exist today--and as they existed 30, 40, 50, or more years ago--to realize that the basic system for getting a higher education in America--the system of "going-to-class" and of course-and-credit-hour requirements--has changed little.

Speaking to the Ohio College Association in April, 1957, Clarence Faust pointed out that education still comes in packages. These packages may vary in size: two, three, five, or more credits; but they are generally prescribed for all; and having amassed a total of 120 such credit-hour packages, give or take a few, the student is considered to have learned and thereby to be eligible for the undergraduate degree.

Aware of a need for change, UREHE submitted to the United States Office of Education a proposal for a series of workshop conferences to foster innovation in higher education, and was awarded a grant of $64,000. The Magnolia Conference (a national conference) was the first in a series made possible by the generosity of the USOE, followed by three regional conferences:

- Winter Park, "New Designs for Liberal Arts Colleges," December 1-4, 1966

---

*Phi Delta Kappan, March, 1960.

- Bard College, "Innovation in the Teaching of Science," January 25-28, 1967
- Shimer College, "Climates of Learning and the Innovative Process," April 26-29, 1967

These conferences served to help identify and stimulate new program developments and curriculum innovations in higher education. They gave particular attention to discovering ways by which colleges and universities can improve the quality of student learning while coping with the problems created by increasing enrollments and rising academic costs. Each Union school sent to the conferences a team of five--four faculty members and one student. There were also participants from other colleges and universities, as well as officials from governmental and private agencies.

Approximately 135 people took part in the Magnolia Conference. It was held at Magnolia Manor, on the North Shore some twenty miles from Boston; and part of its intensity and its fruitfulness may be ascribed to the relative isolation of the group during the four days, part to the adjacent restless sea, always in the background.

Samuel Baskin
President, UREHE, and Director,
Office of Program Development
and Research in Education,
Antioch College.

SUMMARY OF THE PROCEEDINGS

This summary is intended to provide a conference perspective. In no sense is it meant as a substitute for the fuller transcripts, though it may help the reader decide on which of them he wishes to concentrate, should he not want to read the entire report. Therefore, some documentation, examples cited, subtle distinctions, and shades of meaning do not appear here.

THE ADDRESSES

"Experimental Colleges in America." An overview by Goodwin Watson, Professor Emeritus of Social Psychology and Education at Teachers College, and Distinguished Service Professor at Newark State College.

At the heart of Watson's address was his recognition of the difficulties almost always present when innovation is attempted: dangers deriving not only from those threatened by the innovation, but from the innovators themselves. After citing specific attempts at innovation, Watson went on to discuss the dynamics of the change process, including: the dangers of piecemeal change, of over-optimism among innovators, and of swift loss of adaptability; the problems created by the charismatic innovator, whose followers cohere to form an in-group, eliminating further change; the difficulty of maintaining purity of aim when confronted with the need for practical (sometimes conditional) support; the frustrations of working with those who do not share the innovators' zeal--leading to "outgroup hostility;" and various other concerns, such as faculty overload, student selection, the tenacity of academic disciplines, lack of funds, and the sometimes blind idealism of those who create experimental projects.

In response to these concerns, Dr. Watson suggested that experimental schools must either be short-lived or they must be "self-renewing," which requires funds for research and development, mutual trust between all segments of the campus community, and a general understanding of problem-solving processes.

"New Colleges and Their Programs," addresses by four educational leaders. Joseph Tussman (Professor of Philosophy, UC, Berkeley) spoke on "The Experimental College at Berkeley," where five professors from different disciplines prepared a program for freshmen-sophomores, using the "problems" approach--their way of avoiding the "domination of the notion of the academic discipline." They wanted to involve the student with the faculty in ways which would "heighten his capacity to deal intelligently with the major problems with which he is confronted." At the end of the first year they encountered difficulty in recruiting new faculty, partly because such teaching is exhausting, partly because of fundamental differences of opinion as to what a teacher is.

Dan Sillers (President of Jamestown College) spoke on "The Library-College: Prospects for Jamestown." The Library-College is perceived as a way to increase the effectiveness of student learning, "particularly through (though not limited to) the use of library-centered, independent study with a bibliographically expert faculty." The appeals here lie in increased emphasis on learning, thinking, expression of thought, problem-solving; greater curricular flexibility; increased opportunity for individual development and motivation; use of original sources rather than second-hand information; closer student-staff relationships. Library-College problems have to do with whether students are capable of independent study and whether faculty can be stimulated toward the breadth required in such circumstances. In addition, there are questions concerning equipment and space utilization.

Gordon Rohman (Dean of Justin Morrill College) then talked about Justin Morrill College at Michigan State University, created as an "alternative to present patterns of undergraduate education in large universities"--in essence an attempt at "controlled decentralization" which will enable the university to make the best use of its size. Justin Morrill took the living-learning-unit concept already present at MSU and added to it an alternative to the existing curriculum. The college is semi-autonomous, having both the advantages and the disadvantages of shared faculty and curricula. It has its own theme: internationalism and the world community; and its own objective: the teaching of disciplines as "strategies of knowing." Among other things, the theme places emphasis on foreign languages and provides an overseas option for independent study.

Stafford North (Dean of Instruction, Oklahoma Christian College) then described his school's fully electronic learning center, which contains over 700 study carrels (one for each student), each equipped with dial-access to taped lectures, dramas, language lessons, etc. Tape recorders and 8mm projectors can be checked out at the equipment desk. Faculty have been asked "to rethink the objectives of their courses in behavioral terms," and to think anew about time patterns in making assignments. (Dr. North then described an English Composition course which uses the learning center's resources.)

"Materials for Better Learning: an Educational Service." Franklin Patterson, (Consultant to Educational Services, Inc., and President-elect of Hampshire College) described some of the activities of ESI and then went on to comment on the implications of ESI experience for higher education, particularly stressing the point that people and ideas from the disciplines can be of great use in attempting innovation. In addition, he indicated that increased emphasis in the high schools on independent learning is going to have considerable effect on the colleges.

Nevitt Sanford (Director, Institute for the Study of Human Problems, Stanford University) delivered the conference's closing address. He indicated the great need for innovation, suggested some directions it might take, and stressed the importance of basing innovation on firm ideas of what young people are like. Among other things, he stated his conviction that student activism can be "a major source of energy for educational reform today," and that "we have to move experimentation from places such as the Union colleges into the mainstream of American higher education."

THE SEVEN WORKSHOPS

Each workshop group met five times, for a total of over twelve hours. The experiences of these groups were then shared in a panel discussion at one of the final general sessions. The focus for each workshop was provided by one or more colleges which made working papers available to conference participants beforehand; the names of these schools are given in parentheses in the summaries which follow.

Workshop #1: Maintaining the benefits of smallness within the large university (University of California, Santa Cruz; the New Brunswick colleges). Discussion focused on denial of inherent advantages accruing to smallness, size being seen as less important than "certain attitudes and some organizational approaches." Specific aims and obstacles were discussed.

Workshop #2: Developing independent learners in a liberal arts college (Stephens College, Loretto Heights College). Working papers dealt with the teacher in autonomous learning, personality characteristics of the independent learners, student opinion on independent learning, independence from what and for what end, and programmed instruction. In general, there was agreement about the need for improvement in this area, though there were differences of opinion on matters of definition and on allocation of scarce resources (among others, time). The report lists 25 conditions necessary "for maximizing the development of independent autonomous learners."

Workshop #3: The implications of a possible redefinition of disciplines as a way of approaching liberal education (Goddard College). The working paper stressed the importance of "process," --disciplines to be thought of "not as knowledge but as the controls the student develops in using knowledge." These would include such things as "creating, problem solving, decision making, valuing, developing personal style." A number of issues were discussed, including what discipline means to the student, means for evaluating these new disciplines, "How do we narrow the limits of ambiguity to the point of workable communication regarding the nature of the new disciplines?" and "Can the attitudes and approaches of experimental colleges be used to help solve the problem of mass education?"

Workshop #4: Planning and developing a small experimental liberal arts college related to an operating small college (Nasson College). The working paper described Nasson's New Division, with its focus on world order, its regrouping of disciplines, and its redefinition of faculty and student roles. Discussion was based on early agreement that "a clear educational rationale must precede the design of any new college," especially if the college thinks of itself as experimental. Nasson's planning was examined with this precept in mind, and in some places found wanting.

Workshop #5: Developing educational opportunities for Inner-City youth (Monteith College; Illinois Teachers College Chicago-North; Project Apex, NYU). The objective of this workshop was to explore "means for equipping Inner-City youth to participate in the prevailing culture." Discussion focused on such issues as verbal vs. non-verbal matter, possible home-and-college conflict, the need for rapport, and the inappropriateness of the usual curriculum for culturally-deprived students.

Workshop #6: Liberal arts college libraries of the future (Antioch College, Louis Shores, Robert T. Jordan). Working papers dealt with the growing emphasis on independent learning, which creates new needs: for students, better preparation in library use; for the library, new problems of design, equipment, role. The discussion indicated polarization of opinion--some participants favoring the library-college concept, some fearing over-emphasis on one particular aspect of learning. Each group prepared a report, summarizing and defending its position.

Workshop #7: Union for Research and Experimentation in Higher Education: Proposals for research, experimentation, and/or innovation:

1. Ways of improving student contribution to educational innovation.

2. Evaluation of the effectiveness of a semester-long research project early in the student's undergraduate career.

3. Establishment of a program to seek out and support innovators.

4. Identification and study of the characteristics of innovators in higher education.

5. Establishment of a center for the improvement of college teaching.

6. An investigation of student cultures.

7. Study of ways to improve institutional effectiveness through experimentation based on research in student characteristics.

8. Study of the problems and ramifications associated with establishing relatively radical colleges.

9. Faculty-student exchange between an outstanding college and a more disadvantaged one.

10. Funds to enable faculty to view students and how they work with them, not through the behavioral sciences, but through their own disciplines.

11. A journal of innovation, experimentation, and research in higher education.

12. A study of the characteristics of Union college faculties.

13. Development of an institution suitable to the needs of disadvantaged southern Negroes and whites.

PANEL DISCUSSIONS

"Innovation: How Does It Happen?" (Handled in the full report as a series of statements rather than as a discussion.)

Seymour Smith (President, Stephens College) spoke to the problem of establishing "the climate and the conditions for innovation on a college campus." He indicated the need for a continually-renewed institutional commitment to change, for innovation which grows out of real need and a deep understanding of the institution, for administrators and faculty members who believe in and are not threatened by change, for an institution which is just "unsettled" enough to find change desirable. In addition, the school must provide processes through which innovation happens. These include planning and evaluation, which requires such supporting services as a research office or person, opportunity for consultation and visitation, released time, and rewards for good teaching which results from experimentation. An institution which expects to change must have innovation in mind when preparing its budget.

Frank Bowles (Director, Educational Division, The Ford Foundation) defined educational innovation as "try-out of a method of producing change in an intellectual climate." It may arise as a response to an urgent need, as a long-time probe for improvement, and/or as a need to catch up with technical facilities. Innovation is particularly needed in the teaching of science, in the study of environment, in education in the South, in answering the problems of youngsters in big cities, in Negro colleges. Successful innovation requires an intense, focused program; group experience; evaluation which can be articulated with other programs and other institutions; potential for self-renewal.

J. Richard Suchman (Acting Director, Division of Higher Education Research and Division of Elementary-Secondary Research, USOE) addressed himself to "innovation that is the consequence of a process of growth." Professional growth requires, first, freedom "to experiment, to formulate, to make variations and relate what happens to your formulations;" and also freedom of resources: money, materials, space. Second, it requires "a responsive environment," which provides an opportunity to examine consequences, to try out ideas, to hear about others' ideas. To produce this freedom and responsiveness, an institution needs someone to act as a catalyst, someone who is himself creative and responsive. Dr. Suchman then gave two examples of the application of such ideas and attitudes.

Edward Booher (President, McGraw-Hill Book Company) spoke about innovation from the administrator's point of view. An administrator in an innovative institution must himself be an innovator, must be "a first-class idea stealer," and "must be able to . . . integrate and articulate the various parts" of his institution. Innovation should not be institutionalized, however; it is best developed by "having creative work done within the operating parts of the company." The proper climate attracts innovative people; these should be rewarded and allowed to do the things they believe in. Booher's comments ended with two examples of applications of this last idea.

Royce S. Pitkin (President, Goddard College) listed conditions which lead to innovation: dissatisfaction with current arrangements, direct suggestion from outside the college, bringing "an outlander on the inland scene," meeting one need by meeting another, relating an institutional need to an outside program, accommodating to what appears to be a problem, extending existing schemes to new situations. "Innovation is most likely to occur when there is a continuing discussion of problems by as many persons as possible within an institution, stimulated by a person whose primary concern is developing hypotheses and theories."

Ralph Tyler (Director, Center for Advanced Study in the Behavioral Sciences, Stanford) listed four aspects of innovation which, overlooked, can become stumbling blocks: 1) providing necessities for carrying out a planned program; 2) "failure to move from what has been called 'messing around'--which is important--to a more systematic experimental attitude and method;" 3) preventing an experimental program from turning into a new orthodoxy;

4) keeping the experiment going past the first glow of enthusiasm. Tyler gave examples of and solutions to these problems.

"The Students Speak about Experimentation." A collection of remarks by students from various Union and non-Union colleges. A recurring concern was that student energies and abilities are too-little utilized in such things as college policy making. The students saw themselves as a potent force for innovation and for creating a genuine "community of scholars." The discussion which followed these remarks indicated some discomfort with involving students in curriculum planning or in teaching other students. There was also a brief discussion concerning what students "want" from college, "anarchists who are just out for blood," and students as experimental guinea pigs.

"Where Do We Go from Here?" A collection of already brief, usually abstract comments and questions aired at the concluding panel discussion, which dealt with the workshop experiences.

CONFERENCE PROGRAM

Thursday, May 19

2:30 Opening Session. Conference Plan and Intent: Dr. Samuel Baskin, President, UREHE, and Director, Office of Program Development and Research in Education, Antioch College.

3:00 Address and discussion. "Experimental Colleges in America," Dr. Goodwin Watson, Professor Emeritus of Social Psychology, Columbia University, and Distinguished Service Professor, Newark State College. Chairman: Dr. David Riesman, Professor of Social Science, Department of Social Relations, Harvard University.

7:30 General Session. New Colleges, Planned and Underway. Chairman: Dr. Nevitt Sanford, Director, Institute for the Study of Human Problems, Stanford University, and Associate for Planning and Research, UREHE. "The Experimental College at Berkeley," Dr. Joseph Tussman, Professor of Philosophy, University of California, Berkeley; "The Library-College," President Dan Sillers, Jamestown College.

Friday, May 19

9:00 General Session. New Colleges, Planned and Underway (continuation). Chairman: Dr. Adolph Anderson, Dean, New College at Hofstra University. "Small Colleges within the Large University," Dr. Gordon Rohman, Dean, Justin Morrill College, Michigan State University; "Oklahoma Christian College: the Learning Center," Dr. Stafford North, Dean of Instruction, Oklahoma Christian College.

11:15 Organization Session, Workshop Groups.

2:00 Workshop Sessions.

7:30 General Session. Demonstrations and presentations. Chairman: Dr. James P. Dixon, President, Antioch College. "Developments at Educational Services, Inc.," Dr. Franklin Patterson, President, Hampshire College; "Computer-Assisted Instruction," Dr. Ralph E. Grubb, Educational Psychologist, IBM, and Dr. Richard Mattern, Research Psychologist, Thomas J. Watson Research Center; Demonstration of remote-control video-tape facilities.

Saturday, May 21

9:00 General Session. "Innovation: How Does It Happen? Commentary and/or Case Examples." Chairman: Dr. Esther Raushenbush, President, Sarah Lawrence College. Panel: Mr. Edward Booher, President, McGraw-Hill Book Co.; Dr. Frank Bowles, Director, Educational Division The Ford Foundation; Dr. Royce Pitkin, President, Goddard College; Dr. Seymour Smith, President, Stephens College; Dr. J. Richard Suchman, Acting Director, Division of Higher Education Research and Division of Elementary-Secondary Research, USOE; Dr. Ralph Tyler, Director, Center for Advanced Study in the Behavioral Sciences, Stanford, California.

2:00 Workshop Sessions.

Sunday, May 22

9:30 General Session. "The Student and Higher Education: What We Seek." Chairman: Dr. Milton Schwebel, Associate Dean for Instruction, School of Education, New York University. Student panel.

11:00 Workshop Sessions.

2:00 Workshop Sessions; preparation of reports.

7:30 Self-organized groups meet as desired. Union college faculties (and others, if they wish) meet to review and add to "Ideas for Research and Experimentation in Higher Education."

Monday, May 23

9:00	Workshop Sessions; preparation of reports--including plans for follow-up at home institutions, proposals for continuing and/or cooperative activities, other.
10:30	Distribution of Workshop reports.
11:00	General Session. "Experiences of the Workshop Groups: What Happened?" Panel Discussion.
12:45	Closing Comments. "Attacking the Issues," Dr. Nevitt Sanford, Director, Institute for the Study of Human Problems, Stanford University.

CONFERENCE ON INNOVATION IN HIGHER EDUCATION

May 19-23, Magnolia Manor, Magnolia, Mass.

Roster of Concerence Participants

Henry Acres, Assistant President
Hofstra University
Hempstead, Long Island, New York

Arthur Adlerstein
Professor of Psychology
Rutgers State University
New Brunswick, New Jersey

Adolph C. Anderson, Dean
New College at Hofstra University
Hempstead, Long Island, New York

Thomas D. Armistead (student)
Shimer College
Mount Carroll, Illinois

Joseph Astman
Professor and Chairman of Languages
Hofstra University
Hempstead, L. I., New York

Samuel F. Babbitt
President
Kirkland College
Clinton, New York

Samuel Baskin, President
Union for Research and Experimentation
in Higher Education, and Director,
Office of Program Development and
Research in Education
Antioch College
Yellow Springs, Ohio

George Beecher, Director
Educational Experimentation
Goddard College
Plainfield, Vermont

Dan Bergen, Assistant Professor
School of Library and Information
Services
University of Maryland
College Park, Maryland

Harold Berlinger, Chairman
Humanities Division
Illinois Teachers College-North
5500 N. St. Louis Ave.
Chicago, Illinois

Edward Booher, President
McGraw-Hill Book Co.
330 West 42nd Street
New York, New York

Frederick deW. Bolman
Director of Special Programs
Esso Education Foundation
49 West 49th Street
New York, New York

Frank Bowles, Director
Education Division
The Ford Foundation
477 Madison Avenue
New York, New York

Ernest Boyer
Executive Dean
State University of New York
Albany, New York

Charles William Brubaker, Architect
Perkins & Will, Architects
309 West Jackson Blvd.
Chicago, Illinois

Dixon Bush, Director
Antioch Interracial Education Program
Antioch College
Yellow Springs, Ohio

Robert F. Carbone
Special Assistant to the President
University of Wisconsin
Madison, Wisconsin

Sally Cassidy, Chairman
Science of Society Division
Monteith College of Wayne State
University
Detroit, Michigan

Arthur Chickering, Director
Project on Student Development in
Small Colleges
Goddard College
Plainfield, Vermont

Ed Clark
Librarian for Instructional Systems
Antioch College
Yellow Springs, Ohio

Richard Clarke
Associate Professor of Biology
Bard College
Annandale-on-Hudson, New York

Virgil Clift, Director
Apex Program (Office of Economic
Opportunity),
and Professor of Education
New York University
New York, New York

Jewell Cobb
Member of Biology Faculty
Sarah Lawrence College
Bronxville, New York

Lewis Cochran, Provost
University of Kentucky
Lexington, Kentucky

Max Coral
Associate Dean
Monteith College of Wayne State
University
Detroit, Michigan

Denis Cowan
Faculty and Associate Dean
Shimer College
Mount Carroll, Illinois

Miss Janice Dail (student)
Sarah Lawrence College
Bronxville, New York

Charles P. Dennison
Executive Secretary
Provost Planning Committee
Rutgers State University
New Brunswick, New Jersey

James P. Dixon, President
Antioch College
Yellow Springs, Ohio

Vernon J. Dixon
Professor of Economics
Goddard College
Plainfield, Vermont

Miss Minna Erlbacher (student)
Monteith College of Wayne State
University
Detroit, Michigan

Daniel Fader
Assistant Professor of English
The University of Michigan
Ann Arbor, Michigan

Charles R. Foster
Specialist for Science
Curriculum Branch
Division of Higher Education Research
U. S. Office of Education
Washington, D.C.

Miss Carroll Francis (student)
Stephens College
Columbia, Missouri

James Frost
Executive Dean for Four-Year Colleges
State University of New York
Albany, New York

Ralph E. Gauvey, President
Roger Williams Junior College
160 Broad Street
Providence, Rhode Island

Roger Gay, President
Nasson College
Springvale, Maine

James Gilbert, Associate Professor a
Director, Office of Instructional
Services
Northeastern University
Boston, Massachusetts

Miss Ann Giles (student)
Goddard College
Plainfield, Vermont

David Goldberg
Planning Officer
Bureau of Research
U.S. Office of Education
Washington, D.C.

Robert Green (student)
Antioch College
Yellow Springs, Ohio

Ralph Grubb
Educational Psychologist
I.B.M., and Research Associate
Teachers College, Columbia Universit
White Plains, New York

Wilfrid Hamlin
College Editor
Goddard College
Plainfield, Vermont

Winslow Hatch
Specialist for Research
Division of Higher Education Researc
U.S. Office of Education
Washington, D. C.

David L. Hattrick, Research Assistan
Curriculum Branch, Division of
Higher Education Research
U.S. Office of Education
Washington, D. C.

Sumner Hayward, Dean
Macalester College
St. Paul, Minnesota

Alfred Hill, Associate Secretary
Council for the Advancement of
Small Colleges
1327 18th Street, N.W.
Washington, D. C.

Harold Hodgkinson
Dean of the College
Bard College
Annandale-on-Hudson, New York

Thomas Howard
Associate Professor of Psychology
Nasson College
Springvale, Maine

Sister Dorothy Jane
History Department
Loretto Heights College
3001 S. Federal Blvd.
Denver, Colorado

Arnold Jewett, Acting Chief
Curriculum Branch
Division of Higher Education Research
U.S. Office of Education
Washington, D.C.

B. Lamar Johnson
Professor of Higher Education
University of California
Los Angeles, California

Lloyd K. Johnson
Specialist for Science
Curriculum Branch
Division of Higher Education Research
U.S. Office of Education
Washington, D. C.

Robert Jordan, Associate
Council on Library Resources
1025 Connecticut Avenue
Washington, D.C.

Sarah Karwoski
Program Planning Advisor, Division
of Higher Education Research
U.S. Office of Education
Washington, D. C.

Frank Kerins
Director of Institutional Research
Chairman, Department of Philosophy
Loretto Heights College
3001 S. Federal Blvd.
Denver, Colorado

Bruce Kirk
Professor of Psychology
Illinois Teachers College
Chicago-North
5500 N. St. Louis Avenue
Chicago, Illinois

Reamer Kline, President
Bard College
Annandale-on-Hudson, New York

Andrew Krieger (student)
Bard College
Annandale-on-Hudson, New York

Philip Lange
Professor of Education
Teachers College
Columbia University
New York, New York

Sarah Leopold, Chairman
Humanistic Studies Division
Monteith College of Wayne State
University
Detroit, Michigan

Ralph C. Leyden
Director of Educational Development
Stephens College
Columbia, Missouri

Roland Liebert, Director
Environmental Studies
National Student Association
2115 S Street, N.W.
Washington, D.C.

Bert J. Loewenberg
Member of History Faculty and Director
of Center for Continuing Education
Sarah Lawrence College
Bronxville, New York

Charles R. Longsworth
Vice President
Hampshire College
Amherst, Massachusetts

John Ludeman, Head
Psychology Department
Stephens College
Columbia, Missouri

Ernest Lynton, Dean
Livingston College
New Brunswick, New Jersey

Sister Patricia Jean Manion
Assistant to the President
Loretto Heights College
3001 S. Federal Blvd.
Denver, Colorado

Dale Mann
Bureau of Research
U.S. Office of Education
Washington, D.C.

Warren Martin
Research Associate
Center for the Study of Higher
Education
University of California
Berkeley, California

Richard Mattern
Research Psychologist
Thomas J. Watson Research Center
P. O. Box 218
Yorktown Heights, New York

Jacquelyn Mattfeld, Dean
Sarah Lawrence College
Bronxville, New York

John M. Mays
Executive Office of the President
Office of Science and Technology
Washington, D.C.

William McEwen
Dean of Faculties
Hofstra University
Hempstead, Long Island, New York

Miss Melinda Meade (student)
Hofstra University
Hempstead, Long Island, New York

Richard Meisler
Assistant Professor in Philosophy
Antioch College
Yellow Springs, Ohio

Miss Jana Meyer (student)
Loretto Heights College
3001 S. Federal Blvd.
Denver, Colorado

Warren Miller
Faculty and College Examiner
Shimer College
Mount Carroll, Illinois

F. Joseph Mullin, President
Shimer College
Mount Carroll, Illinois

Herbert Nestler (student)
Illinois Teachers College Chicago-North
5500 N. St. Louis Ave.
Chicago, Illinois

Stanley Newman
Assistant Professor of Anthropology
Illinois Teachers College Chicago-North
5500 N. St. Louis Ave.
Chicago, Illinois

Stafford North
Dean of Instruction
Oklahoma Christian College
Oklahoma City, Oklahoma

Franklin Patterson, President
Hampshire College
Amherst, Massachusetts

Richard Paulson
Program Director, Special Projects
Undergraduate Science Curriculum
Improvement Programs
National Science Foundation
Washington, D.C.

Ellis Pellegrino, Chairman
University Senate and
Professor of Medicine
University of Kentucky
Lexington, Kentucky

Royce S. Pitkin, President
Goddard College
Plainfield, Vermont

Sister Vivian Mary Powers, Chairman
Department of Spanish
Loretto Heights College
3001 S. Federal Blvd.
Denver, Colorado

Esther Raushenbush, President
Sarah Lawrence College
Bronxville, New York

John Reid, Associate Professor
Science of Society Division
Monteith College of Wayne State
University
Detroit, Michigan

Lawrence Resnick
State University of New York
College at Cortland
Cortland, New York

James G. Rice
Academic Vice President and
Dean of Instruction
Stephens College
Columbia, Missouri

David Riesman
Professor of Social Science
Department of Social Relations
Harvard University
Cambridge, Massachusetts

Robert A. Richardson
Faculty Intern
Shimer College
Mount Carroll, Illinois

teve Rod (student)
asson College
pringvale, Maine

ordon Rohman, Dean
ustin Morrill College
ichigan State University
ast Lansing, Michigan

arilyn Rose
iterature Department
tephens College
olumbia, Missouri

oodburn O. Ross, Dean
onteith College of Wayne State
niversity
etroit, Michigan

on Roush
ssistant Professor of Humanities and
iterature
eed College
ortland, Oregon

erome Sachs, President
llinois Teachers College Chicago-North
500 N. St. Louis Ave.
hicago, Illinois

evitt Sanford, Director
nstitute for the Study of Human
roblems
tanford University
tanford, California

ilbur Scott
eaching Fellow
ew College at Hofstra University
empstead, Long Island, New York

Milton Schwebel
Associate Dean for Instruction
School of Education
New York University
New York, New York

Leo Segedin
Assistant Professor of Art
Illinois Teachers College Chicago-North
5500 N. St. Louis Ave.
Chicago, Illinois

Clovis Shepherd
Program Director
National Training Laboratories
Washington, D. C.

Louis Shores
Dean of School of Library Science
Editor-in-Chief, Colliers Encyclopedia
Florida State University
Tallahassee, Florida

Dan Sillers, President
Jamestown College
Jamestown, North Dakota

Nancy Skougor
Program Planning Advisor, Division
of Higher Education Research
U.S. Office of Education
Washington, D.C.

G. Kerry Smith
Executive Secretary
Association for Higher Education
1201 Sixteenth St., N.W.
Washington, D.C.

Peter Smith
Assistant to the Chancellor
University of California
Santa Cruz, California

Norman Somers
Dean of the New Division
Nasson College
Springvale, Maine

Charles H. Stamps
Director of Learning Services
Illinois Teachers College Chicago-North
5500 N. St. Louis Ave.
Chicago, Illinois

Seymour Smith, President
Stephens College
Columbia, Missouri

John L. Stewart
Provost of the Second College
University of California at San Diego
San Diego, California

J. Richard Suchman, Acting Director
Division of Higher Education Research,
and Division of Elementary-Secondary
Research
U.S. Office of Education
Washington, D.C.

Mildred Swinson
Associate Professor of Psychology
Nasson College
Springvale, Maine

Robb Taylor, Acting Chief
Research Branch
Division of Higher Education Research
U.S. Office of Education
Washington, D.C.

Bruce Thomas, Librarian
Antioch College
Yellow Springs, Ohio

Vernon R. Thomas
Professor of Psychology
Goddard College
Plainfield, Vermont

James Trent
Research Associate
Center for the Study of Higher
Education
University of California
Berkeley, California

Joseph Tussman
Professor of Philosophy and
Director of the Experimental Colleg
University of California
Berkeley, California

Ralph Tyler, Director
Center for Advanced Study in the
Behavioral Sciences
202 Junipero Serra Blvd.
Stanford, California

Major Joe Velarde, Jr.
Education and Training Advisor
U.S. Air Force
2600 16th Street, N.W.
Washington, D. C.

James Wallace
Wallace Associates
4334 W. Central Avenue
Toledo, Ohio

William Walter
Associate Professor of Literature
Bard College
Annandale-on-Hudson, New York

Goodwin Watson
Distinguished Service Professor
Newark State College
Union, New Jersey

Paul Vonk
Vice President for Academic Affairs
University of West Florida
Pensacola, Florida

Harold Yuker
Director of Instructional Research
Hofstra University
Hempstead, Long Island, New York

Conference Secretary:
Mrs. Renate Muffler
Antioch College
Yellow Springs, Ohio

Conference Addresses

DIMENSIONS OF CHANGE IN HIGHER EDUCATION

The First Conference on Innovation,
held May 19-23, 1966, at Magnolia
Manor, Mass., under the auspices
of the Union for Research and
Experimentation in Higher Education.

- Goodwin Watson, "Experimental Colleges..."
- Joseph Tussman, "Some Current Experiments..."
- Dan Sillers, "The Library College..."
- Gordon Rohman, "Justin Morrill College..."
- Stafford North, "Oklahoma Christian College..."
- Franklin Patterson, "Materials for Better Learning..."
- Nevitt Sanford, "Attacking the Issues"

Conference Reporter, Will Hamlin

Edited by Will Hamlin, Goddard College,
and Lawrence Porter, Antioch College

EXPERIMENTAL COLLEGES IN AMERICA

Goodwin Watson

Goodwin Watson is Professor Emeritus of Social Psychology and Education at Teachers College, and Distinguished Service Professor at Newark State College. He has long been involved with experimental colleges.

"It must be considered," wrote Machiavelli to his prince, "that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new." The lukewarmness, he adds, arises "partly from the incredulity of mankind who do not truly believe in anything until they have had actual experience of it."

The inauguration of any new institution, like the birth of each human being, is a precarious innovation with only small probability of fulfilling all the hopes of those who have brought it into existence. Every college and university was in its origin a creative venture. Harvard in 1636 and William and Mary in 1693 were adaptations of old-world memories to the conditions of a new world. Dissatisfaction with the religious climate at Harvard led to the tutorial experiments in New Haven which, after ten years and two donations of books, became Yale University. Horace Mann's Antioch, Andrew Dickson White's Cornell; Daniel Coit Gilman's John Hopkins, David Starr Jordan's Stanford, and William Rainey Harper's Chicago began as imaginative projections into unchartered territory. Paul L. Dressel writes of Michigan State University that it "shares with almost every other university the view that its founding was an innovation of primary importance."*

A generation ago, Dean C.S. Boucher wrote: "Students, faculty members, and administrative officers of our better colleges are at present more constructively critical of the shortcomings of undergraduate education than at any previous time in history."** Innovation was then rife at Stephens, Bard, Rollins, Black Mountain, Reed, Wisconsin, Bennington, and Sarah Lawrence. Most of these are still actively pioneering, and many new enterprises have since emerged. The name "New College" has arisen at Columbia University, in Massachusetts, at Sarasota, and at Hofstra. Assembled here are spokesmen for other new colleges with names which many experienced educators might be hard put to identify: Hampshire, Justin Morrill, Livingston, Monteith, Nasson, and Shimer. We might well have had participants also from Corvell, Raymond, Oakland, St. Andrews, St. Michaels, York University, and many more. This is another of those periods in the history of higher education which Marjorie Carpenter has described as a Renaissance, with "a new spirit in the air."*

---

* W. H. Stickler, Experimental Colleges, Tallahassee, Florida: Florida State University, 1964, p. 122.

** National Society for the Study of Education, 31st Yearbook, Part II, p. 9, 1932.

The reasons for the spate of new institutions at this time are well-recognized. Those forces which have brought experimental colleges into life are still mounting. The explosion of knowledge has not reached its peak. National income is rising. Automation is doing even more of the simple, repetitive jobs. The rising curve of numbers of applicants for admission both as undergraduates and in graduate schools show no sign of leveling off. Now would seem to be an appropriate time to take some inventory of the innovations and to examine their dynamics and life histories.

Responding to contemporary pressures, most experimental colleges embody certain common features. They are trying, in President Kerr's words, "to seem smaller as they grow larger." They are concerned for general, liberal education. They move away from a proliferation of specialized courses toward larger interdisciplinary units. They try to restore prestige to teaching, to offset pressures toward research and publication. They encourage independent study and experiment with new technologies for aiding learning. They change to a year-round calendar. They cultivate campus communities, but also carry students out into the field of practical affairs. They are world-minded, and often provide for experience abroad.

This paper is not to inventory the content of current change, but rather to study the dynamics of the change process. The propositions we can offer are tentative. Few will hold for all cases. Whatever value they may have is not as dogma or rulebook, but lies in the questions they raise.

Specific Reforms versus New Holistic Designs

Winslow R. Hatch has commented critically on the scope of much of the innovation in American colleges and universities: "Experimentation in higher education is piecemeal--inadequate in scope, design, and pace, whereas problems in higher education are massive, multifaceted, and interdependent."**

---

*In Stickler, op. cit. p. 2.

**W. R. Hatch, The Experimental College, U.S. Office of Education, 1960 (Inside cover).

Experimental colleges, like Utopian colonies, grow out of dissatisfaction with reforms limited to bits and pieces. Each change introduced into an established institution has disturbing effects on other parts of the organization; it may create more trouble than it eliminates. New enterprises in higher education follow the New Testament injunction about the superiority of a new garment to patches on the old one (Matt. 9:16-17). Their creators decline to put new wine into old bottles. They seek a new design in which each part is harmoniously integrated with all the others.

For all its merits, the Utopian design also has disadvantages. Moving in the realm of ideals and fantasy rather than realistic operation, the innovators can too easily assume that conditions, faculty, student, and public attitudes will be more favorable than they actually turn out to be. Moreover, the effects of limited reforms can be more easily appraised. When a whole experimental college succeeds or fails, it is difficult to disentangle the key operative factors.

Another problem with Utopias is that they are works of art. At best, they achieve a remarkable balance, integration, and unity. Hence they are resistant to alteration. Their creators try to preserve them entire, and see further change as destructive. Experimental colleges almost inevitably encounter the problem of how to keep adaptable without losing coherence and unity.

The Prophets and the Practitioners

The key men who design an experimental college are likely to be gifted with exceptional vision and creativity. Their dream, however, must be made a reality by followers who have other interests and qualities. The prophet and seer is seldom an efficient manager and is likely to be impatient with administratrivia. Plato, as you remember, ran into problems when he tried to implement his Republic. Visionaries and bureaucrats inevitably irritate each other. Prometheus had great hopes for mankind; his brother Epimetheus, despite warnings, married Pandora and let loose endless troubles. "The vision of one man, warns Gibran, "lends not its wings to another."

A particularly troublesome problem arises when the Great Man internalizes his charisma. Most of the Utopias had to cope with Founders who came to believe that they were indispensable. Men like Lenin and Stalin, Hitler and Mussolini seldom provide suitable successors. There have been stormy days in a number of colleges when their dominant personality had to be replaced.

A typical formation in the experimental college faculty is a core group consisting of the Founding Father (or Fathers) surrounded by an inner circle of close admirers and collaborators. Further from this core are numerous additions and newcomers needed for institutional operation, but to whom the original vision has not been well communicated. Eventually a schism develops between those dedicated to the initial revelation and the larger group with varied perceptions of the college idea. The founders feel that their great vision has been distorted and profaned; the men of affairs would like the saints and their halos relegated to some museum.

The Precipitating Increment

The dreams of the innovators become a reality at the moment when some substantial aid is suddenly forthcoming. The little group of scholars in the colony of Massachusetts had no university until John Harvard left them £780 and two hundred and sixty books. The gift of an estate seen as suitable for the location of a new college has often transformed plans from paper to practicality. Not infrequently, the bequest carries explicit or implicit conditions, which do not wholly accord with the original hopes. Then the innovators face a difficult choice between preserving their pristine aims and launching a viable, but different, enterprise. In any case, the transition from ideas to operation is a time of troubles.

Problems Unforeseen or Underestimated

Reading the accounts of present and emerging experimental colleges, we find numerous statements of admirable goals, outlines of informative curricula, descriptions of promising methods and ingenious equipment--but almost no anticipation of the probable problems. Reports at conferences like this seem seldom to tell of doubts, difficulties, or defects. Dean John W. Gustad, describing New College (in Sarasota) shortly before it opened, did say, "The problems of creating a genuinely distinguished college are almost unbelievable."* But with that one sentence he stopped. The incredible difficulties are, unhappily, left to our imagination. There is a regrettable reluctance to talk about generic or specific obstacles, either in advance or in retrospect.

---

*In Stickler, op. cit. p. 56

We mentioned earlier that the original design tends hopefully to assume almost ideal faculties, students, and public support. In practice, the faculty often turns out to be less amenable than had been anticipated; the students prove less able to use their freedom; the equipment develops "bugs"; and the public remains skeptical. Experience in sensitivity training (T-groups) has shown that group members are usually better accepted by their peers when they reveal their mistakes and failures than when they tell about their achievements and success.

Let us look briefly at the problems arising from six rather common mistakes:

1. Faculty Overload

A frequent failing of new colleges is faculty overload. Team teaching is more time-consuming than had been realized; so is tutorial supervision of individual students. Preparation of materials suitable for independent study may take much longer than conventional class preparation. At another New College (now Hampshire), six faculty members responsible for the year-long integrated course "Introduction to Science and the Humanities" were all expected to sit in on every session and to meet regularly between sessions for cooperative planning. Field visits demand far more time than do classroom sessions. When at Newark State College we asked one faculty member to take responsibility for the full-time instruction of fifteen freshmen, it proved a far heavier load than meeting five times that number in the usual courses. If an experimental college has limited financial resources, its faculty must expect to be severely exploited.

2. Student Attitudes

Another disappointment has often been the attitude of students. A college which conveys the public image of being experimental and different exerts a magnetic attraction upon students who have not succeeded in more conventional institutions. In some cases, the student's difficulty does lie in outmoded curricula and procedures, and the experimental college releases unprecedented growth and achievement. There are not a few other cases, however, in which the difficulty lies in the students' rebelliousness, and such students are fated to repeat on the new campus the same mistakes which brought previous failures.

A legitimate concern of the administration of any new-fangled sort of college must be its fascination for the misfits, offbeats, and never-do-wells among both students and faculty. Perhaps some of you, during workshops, can suggest screening procedures to differentiate the potential high-achievers from the perennially dissatisfied

A different sort of problem arises from the attitudes of students who are too much the conventional dependent type. An account of one of the earlier innovations at Parsons College reported: "Often the students who most needed [the tutorial workshops] failed to show up."* Many other colleges have found that students for whom faculty set aside hours of individual counseling value it so little that they neglect to appear. Given the opportunity for independent study, some students feel no inner challenge to read, to explore, to think, or to learn; they revert to the timeworn tactics for getting maximum credit for a minimum of work.

The Massachusetts Committee for a New College reported, as a result of their pilot experiment: "The most unmistakable result was the illustration of the _extraordinary hold that the standard course system_ had on the minds of students and faculty, and _the remarkable lack of sophistication_ of the normal college student when faced by an unstructured learning situation."**

Experiments with independent study have shown that most students don't learn well unless they have been given rather thorough preparation and unless plenty of feedback is built into the study process.

3. _Out-Group Hostility_

Experiments like Meiklejohn's at Wisconsin or New College at Columbia University's Teachers College, which have been carried on within a larger institution continuing its business as usual, have encountered unexpected hostility from the parent university. The innovations of the experimental unit were seen as implicit criticism of the established practices on the surrounding campus. Out-group faculty became defensive and belittled the experiment. Out-group students made fun of the more earnest experimental novitiates. In both of these instances, rejection from within the university played a major role in terminating the experiment.

---

*W. H. Stickler, _op_. _cit_., p. 61

**S. Baskin, _Higher Education_: _Some Newer Developments_. New York, McGraw-Hill, 1965, p. 60

Hostility is often encountered also from the surrounding public. Horace Mann's troubles at Antioch in the 1850's were due to religious leaders opposed to his ideas. Southern Florida very recently ran into a legislative inquiry, suspicious of radicalism or liberalism. Few experimental projects have the public image they feel they deserve. The larger community is only too ready to attribute addiction to LSD and sexual laxity to any unconventional youth group.

4. Tenacity of the Academic Disciplines

Some of the most vigorous resistance to curricular change arises from the hold of the subject-matter disciplines. Practically all faculty have themselves been taught within the customary divisions of knowledge. Most of them belong to professional associations which emphasize their specialty--mathematics, chemistry, psychology, history, French, or whatever. Most of them feel closer to men teaching the same subject in other colleges, and reading or writing for the same journals, than they do to colleagues teaching other subjects on their own campus. Dean Ross of Monteith College has found the primary professional loyalty of most faculty members "to be not to their universities or to the courses they teach, but to the disciplines which are national or international in scope." Hope for promotion in his department or for an attractive offer from another institution usually depends on the professor's status among the specialists in his field. Hence, he is reluctant to give himself wholly to interdisciplinary teaching projects. Many broad general courses start out as interdisciplinary ventures but end up as departmental offerings. Team teaching after a few years tends to be taken over more and more by one team-member, while the interest of others wanes.

5. Financial Problems

There remains a rather frequent difficulty due to underestimation of the financial requirements. Most of the Utopian colonies in North America failed to make ends meet. Many educational experiments, noble in aim, at every level from nursery school through adult education, have struggled hopelessly to get adequate financial support. In the endeavor of the institution to stay alive, faculty and students are both exploited, and sometimes irregular financial maneuvers are undertaken. A particular danger arises when grant of funds covers the initial operation, but expires before the institution can establish self-support. It is hard for the planners--impatient to make their dream come true--to decline to make a beginning, simply because they cannot see clearly where money will come from at some later stage. Over-optimism is sometimes a prelude to bankruptcy.

6. Blindness of Idealism

Aggravating all the preceding problems is the special blindness of idealism. Possessed by a vision, the creators of experimental projects keep their wagon hitched to a star, and easily disregard bumps on the highway. The promoters of a new scheme seldom build in feedback mechanisms to alert them to minor breakdowns. Their faith in the Cause easily triumphs over the data from any evaluation research they may tolerate. The pride they feel in their achievement keeps them insensitive to the mounting discontent. The problems which have been disregarded occasionally culminate in an explosion; more commonly makeshift adaptions accumulate in a creeping regression from the experimental ideal.

Trends Towards Regression

Most experimental colleges are more distinctive in their first few years of operation and become less so over time. The dream accommodates to hard reality; faculty, students, and parents gradually infuse into the new enterprise the expectations and habits they have acquired elsewhere. Even faculty members who are drawn to the project because of its innovations bring with them residues of traditional operation.

Regression is due also to the dilution of the enthusiasm and dedication of the pioneers. Later additions to the faculty do not share the initial commitment. Indoctrination of new members becomes a formality, and the familiar methods as well as the familiar course contents reemerge.

The distinctiveness of the original experiment declines also as other colleges undertake related projects. An innovation of ten years ago may have become common practice on many campuses today. To be on the frontier is a thrilling experience, but one can't build a stone mansion there. The frontier keeps moving.

It has been observed that the great years of an experimental college are its first ones. Whether it eventually regresses, becomes static, or dies, the participants in its early creative efforts enjoy a great educational experience. Maybe our quest for the highest level of student and faculty involvement would lead to experimental colleges whose life is limited to seven or eight years, to be followed by death and possible resurrection in some glorified reincarnation. It is interesting to note that the Meiklejohn experiment, Black Mountain, and New College at Columbia University each had a life of about seven years.

The alternative is a model rather different from the Utopian college designed once-and-for-all to provide enduring excellence. The emerging model follows a principle of successive approximations. Last year's solutions are carefully evaluated and corresponding improvements proposed for next year. Each subsequent program takes better account of all the dissatisfactions with the present. A self-renewing institution need not lose the comprehensive, integrated, holistic quality which distinguishes designed colleges from those composed of piecemeal reforms and patches.

We do not yet know just what social structure will best facilitate the self-renewing college. Almost surely, there will be some person or bureau devoted to continuous work in research and development. There will be a general climate of mutual trust encompassing administration, faculty, and students, so that ideas and feelings are frankly expressed and fully respected. From time to time the participants will need to examine and perhaps recreate this climate. There will be general understanding of, and skill in using, processes of problem-solving, which include diagnosis, invention, and appraisal. Instruments will permit charting curves portraying periodic evaluation by students, teachers, and administrators. Search for possible improvements will be systematic rather than sporadic. Resources for innovation within the college will be fully utilized, and there will be constant scanning of developments in other institutions. No single change will be introduced, however, without full consideration of how all related activities may be affected. Each successive approximation is not introduction of reform in one item within the system, but a redesign of the whole system to incorporate desirable changes in an integrated whole.

SOME CURRENT EXPERIMENTS: FOUR NEW COLLEGES AND THEIR PROGRAMS

The Experimental College at Berkeley

Dr. Joseph Tussman, Professor of Philosophy, University of California, Berkeley

The worst feature of the educational situation in colleges has always been the first two years. We all know what happens to freshmen who come to the university with reasonable ability and high expectations, and are terribly disillusioned, frustrated, and lost for the most part to rational life.

At Berkeley, we addressed ourselves to that situation. Our position was that the first two years had to be freed entirely from the domination of the notion of the academic discipline. Once one thinks about it, it becomes clear that there is no reason at all why education in the first two years--'general education' or 'liberal education'--should be regarded as an introduction to, or an initiation into, that particular trade we call an "academic discipline."

Our problem was to break with that notion completely. To do so, we had to get rid of courses (the administrative unit that carries with it all of the freight of departmental life). We confuse taking courses with getting an education. When you throw out courses, you also throw out what the course is about, which is a "subject." A subject is an academic substitute for a problem.

We decided we would go directly to the problems. Borrowing from the Experimental College at Wisconsin--with some modifications--we decided we would spend the first semester of our two years on the problem of the Peloponnesian Wars in Greece. Why did Greece destroy itself by war? The second semester we would all focus on seventeenth-century England, the Puritan Revolution. The third and fourth semesters would in one way or another be on America, ending with the study of one great American problem--the problem of race, for example.

We did not regard this as an interdisciplinary program. We regarded it as a subdisciplinary program. We were fairly radical about the rejection of the academic disciplines. We did think, however, that we needed some coherent integrating basis, and this series of problems was what we selected.

As to the faculty, we were a group of five friends. It so happened that we represented a variety of traditional academic disciplines--one was a lawyer, one a poet, one a mathematician, one a political scientist, and one a philosopher. But we all came into the program perfectly prepared to abandon any status we might have had as defenders or proponents or representatives of any one academic discipline. Instead, we were all to read the same things at the same time, and to work as much as possible in the same way.

We were subject to a great many criticisms. In my mind the most fundamental and valid criticism, the one that has to be taken very seriously, is this: A university is a collection of specialists. Its genius is essentially that of presenting the students with an expert in something, a man of high achievement in a special field of interest. That is a powerful conception, and hazardous to depart from.

Nevertheless, we did try to depart from it--by taking an essentially amateur view of the situation, abandoning the course, abandoning the subject, abandoning academic discipline, and saying that what the student ought to be doing for the first two years is to heighten his capacity to deal intelligently with the major problems with which he is confronted (the problems of War and Peace, Freedom and Authority, Obedience and Revolution, the Individual and Society). The way for him to do that, we said, is to become part of an ongoing, institutionalized search for understanding with a number of faculty members who are themselves willing to share that search with their students.

It is hard for a faculty member to forget that when he gets up and says something he is supposed to be speaking from a position of some kind of certified authority. At first we were all very reluctant to talk about things outside of our fields. What, I might ask, have I got to say about the Odyssey, or about Paradise Lost? But whatever we were doing, we did, not by virtue of our being experts in the traditional sense, but because we were involved, as the students were involved, in a coherent attempt to understand certain major problems.

Our particular contribution turned on our greater experience--on our being teachers, our capacity to retain an interest in what someone else was thinking about. We could give useful advice, too, about writing, about clarity of expression. We could make some judgements that were helpful to students about the development of their own capacities.

Our innovation, in short, consisted in trying to depart drastically from the entire discipline-course-department structure. It rejects the professional conception of the nature of college teaching. It poses a fundamental challenge to the faculty and to the traditional structure of the university. But it is a challenge that has to be met, I think, if one is to make a distinction between professional, pre-professional, or quasi-professional training, and the notion of a truly liberal education.

Whether this experiment will continue and grow depends on a lot of things. Immediately and primarily, it depends on whether we can recruit enough faculty members to teach in it. The university administration was extremely anxious for us to follow up this initial group of students and faculty, now finishing its first year, with another group starting this September. I agreed to try to put together a faculty. I went through twenty-five or thirty logical candidates--and got one taker! We may be unable to keep this program going for no other reason than our inability to recruit five or ten members of the faculty.

Part of this inability to recruit perhaps, is that teaching in this program is exhausting. There are about 150 students, five faculty members, and five teaching assistants. Tuesday is conference day. All students and faculty keep their time available from 10:00 to 12:00 and 2:00 to 4:30. In these Tuesday conferences, our function as faculty is to pose the issues and state the problems, to spark thinking and discussion. This sparking can take a variety of forms: sometimes a lecture, sometimes a panel--often leading into arguments, questions from the floor, or a real free-for-all. An exhausting Tuesday. Additionally, each professor meets weekly with two seminar groups of fifteen students for sessions of at least two hours each. Students write papers, and when they turn them in, there are likely to be individual conferences lasting anywhere from half-an-hour to an hour-and a-half. We also try to spend our evenings in or around the program center--an old sorority house on the edge of campus--whenever we can.

The problem arises as to how we can take the available amount of teaching energy and apply it so as to facilitate student intellectual life. Sometimes a student needs three hours--it may be the turning point of his life--and you have got to be prepared to give that time. You will not find it if you are spending fifteen hours a week routinely seeing everybody for half-an-hour. You have got to keep yourself free to do what needs to be done, when it needs to be done--if you are wise enough to know when it needs to be done.

You see how exhausting it can be. You move into a program like this from a five- or six-hour teaching load to something like thirty or thirty-five at least. That is one reason I think it is highly unlikely that the present faculty group would continue with the program. In principle, I think we probably should not either. We would not do as good a job the second time. All I am reading I have never taught before. I am having a great time, it is very stimulating. But I would lose this the second time around. I would not have to struggle as hard, and I might even begin to think of myself as an expert!

There is one other danger in this kind of innovation. We work together very closely. We see each other at work as few professors do. We may be admiring, we may be envious of how another person performs, but this is not threatening. What is threatening is that somebody has a radically different conception of what a teacher is. This cuts deeper and makes cooperation much more perilous. It poses a threat to your whole concept of your relation to students, of what the shepherding or caretaking or teaching function really ought to be.

Though disagreement is important, and has to be provided for, it is fruitful only when it operates within the framework of a broader and more fundamental agreement. Significant difference about the theory of teaching sometimes reaches the point of destroying any basis for working together, unless there exist some deeper agreements which can heal the differences, or at least comprehend them.

The Library-College: Prospects for Jamestown

Dan Sillers, President, Jamestown College

Who is driving the challenge of learning and the delight of discovery from the experience of American college students?

"Not I," said the college professor who drones on in a monotonous tone and allows no questions. "Not I," said the college dean who prefers that students should always be well-mannered and never bring ill repute to their Alma Mater. "Not I," said the college president, who would like to have things go along as they are, with no one rocking the boat. "Not I," said the registrar who always wanted things short and concise, an alphabetical letter to be the sum-total of a teacher's evaluation of a student, and classes and courses to be of equal length and value, meeting at the right time so they might be measured with precise administrative accuracy. "Not I," said the subject-matter academician who felt that there was only one discipline necessary in the education of youth, and who knew which one it was.

Most educators appear to feel, or at least operate, on the premise that curiosity of inquiry is an insignificant factor in the motivation of students. The cause cannot be easily explained; and certainly no one group of persons or educators can be wholly to blame. Therefore, we must examine ourselves constantly so that we educate not the easiest, but the most effective way.

Albert Einstein once stated that "It is nothing short of a miracle that modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry." There is a feeling among a small but growing group of American educators that we must not continue to abet this criminal offense to our youth and society. They feel the necessity to evaluate consciously the effect of their practices in teaching, and to dedicate themselves to fanning the flame of curiosity and creativity in attempts to give meaning to learning and life.

"Now that students can read for themselves," says Professor Henry Steele Commager, "the English universities have turned more and more from lectures to tutoring, or to self-education...but in the United States, which has the best library facilities in the world,... professors go on giving courses as blithely as if no printed books were available. One simple way, then, to meet the shortage of teaching talent is to cut down on the lectures and therewith the number of professors that lectures call for. From the point of view of the student, the time spent going to lectures and preparing for course examinations can more profitably be spent in the library." Professor Commager's remark provides a parallel for an idea which has come to be known by some of us as the "Library-College" concept of education.

The Library-College is not a new idea. As early as 1935, Dr. Louis Shores had begun writing on the library-centered college as a stimulating source for education. It was not until thirty years later, December of 1965, however that the first Library-College Workshop was organized at Jamestown College to examine and establish an ideal design for a Library-College. Nearly thirty American educational leaders--including college presidents, deans, professors, and librarians--participated.

The resultant Library-College charter states that "The purpose of the Library-College is to increase the effectiveness of student learning, particularly through (though not limited to) the use of library-centered, independent study with a bibliographically expert faculty. This charter assumes that the Library-College concept can and should be adapted to colleges with varying objectives and philosophies. The curriculum of a particular Library-College must emerge from its objectives and philosophy."

The Library-College concept is still an idea only. But it is becoming increasingly crystallized in the minds of the faculty, administration, and board of trustees of Jamestown College. We find the idea appealing and challenging for a number of reasons:

(1) The concern for learning, thinking, expression of thought, and problem-solving will have greater emphasis. Less time and effort will be spent in the memorization and accumulation of minutiae.

(2) Curriculum flexibility allows a necessary freedom conducive to learning. The de-emphasis of the traditional lecture-text recitation method and formal classes gives greater freedom and allows the

student and faculty to take advantage of other educational experiences, including actual involvement in real-life situations, such as field trips, work-study programs, community service, etc.

(3) More time and attention may be given to gearing the educational experiences to the needs of the individual, thereby making greater use of the student's own motivation for development. Team teaching, seminars, and large-group activities will be stimulated by need rather than pedagogical divination.

(4) Major emphasis is placed on reading, on function of thought and ideas, and on problem-solving, rather than categorization by discipline, geographical areas, and time periods.

(5) Emphasis is placed on the intellectual initiative, exploration, self-discipline, and general responsibility of the student through independent study and involvement in the planning and execution of his individual program.

(6) The educational tools (generic books) become important contributors to learning. Students and faculty would make substantial use of original sources rather than second- or third-hand information.

(7) The Library-College allows for greater humanization in the learning experiences when most needed. The student-faculty relationship in planning sessions, discussions, and seminars creates the atmosphere of colleagues working together in the quest of knowledge. All professional staff will be continually learning and broadening their experiences, both through use of library resources and through personal interaction with one another, bringing closer to realization what is often thought to be the ideal situation in learning--the teacher at one end of the log and the student at the other, both holding down their respective responsibilities.

(8) The teacher's basic responsibilities would not be those of a lecturer or curator of minute factual information, but of: 1. a counselor, who understands people and is capable of communicating with them and is not afraid to become involved in human relationships; 2. a resource person, who is familiar with resource materials--where they can be found, effective use of

them, their limitations, etc.; 3. a *group leader*, who understands group dynamics and can use this knowledge effectively to create meaningful learning experiences; and 4. a *scholar*, who is continually learning, who is capable of asking questions and searching out answers, and who knows or strives to know more about the dynamics of learning.

Our concept of the teacher is supported by Gibran in *The Prophet*, and similarly stated by Prausnitz:

> The good teacher is not the owner of the key to knowledge; he possesses few answers, but he must have the humility to admit this, the perseverance to accept young minds on their level, the enthusiasm to push them farther on their own path, the breadth of concept which makes his own area of specialization only one of the vast storehouse of human endeavor, the sincerity which creates not imitation or admiration but only or at least mainly integrity, and the patience to accept the fact that his contribution will be small and almost indiscernible.

The Library-College concept sounds encouraging for education. But can it be put into practice? Is the average student capable of independent study and will he benefit from it? Does sufficient learning take place in an independent study approach? What is the effect on a student when he is forced into a stricter regimen after leaving the free and independent climate of the Library-College situation?

Can we develop in faculty a new set of values and satisfying experiences, which will stimulate them toward acquiring breadth in their training and becoming aware of bibliographical resources in their field? They must also develop the willingness to counsel and understand, as well as develop skills of empathy to enable them to function as group leaders, at the same time requiring excellence in student performance. (A number of studies indicate that the role of the teacher must change if education is to make a greater and more significant impact upon society. Mary Owens in a recent issue of *Liberal Education* and Nevitt Sanford in a recent article in *Alma Mater* make this same inference.)

What will be the new means of motivation? What will be its curriculum? Where will it get its teachers? Will the college survive? Any one of these questions would be sufficient to discourage faculty and administration alike. They frighten even the stoutest hearts and bring forth a clamor of negative reactions. Many faculty might say that these objectives stand absolutely contrary to human nature and are therefore impossible expectations.

Historically, at least, this is not true. Traditionally, the objectives of education have always been somewhat contrary to the normal practices of society at any particular time. Education must strive to seek out in the individual a willingness to use his intellect and assist him in developing an awareness of his emotions so that he is not a "mass man" but, in Maslow's terms, "a self-actualized person," or in Mumford's, "the organic person." Such men are described by Schweitzer as those "who revolt against the spirit of thoughtlessness and have a personality sound enough and profound enough to let the ideals of ethical progress radiate from them as a force, thereby starting an activity of the spirit which will be strong enough to evoke a mental and spiritual disposition in mankind."

Structure and facilities will also present problems. Should each student have his individual carrel in the library? If independent study is to play a major role in the student's search for knowledge, should he not then have a carrel designed in such a manner as to be attractive and conducive to study for long periods of time? It would also seem that his carrel should have all the equipment of the new electronic and audio-visual media.

Or is it more feasible to design a dormitory room in such a manner that the student would spend the majority of his time there, by bringing supplies and resources to his area? Should the library be decenralized into dormitories? Should faculty offices be in the dormitories with available conference rooms? Should they be in the library? What is an adequate number of volumes for the library of a Library-College?

Implementation of the Library-College concept of education will, no doubt, add many problems of a technical nature as well as new demands for the educational dimension of the college. But it appears to me that education too long has been dictated by unimaginative custodians of materials and resources.

At Jamestown College we are gathering together our faculty and consultants to concentrate on finding out what we can about all of these questions. It is our goal to develop an educational program through a Library-College concept that will produce an educated person, as described by Harold Howe: "I consider him to be an educated man, who possesses the ability to use his knowledge to cultural ends, who in the face of truth and circumstances can change his mind, who will be influenced by reason but who will not be swayed by prejudice, and who will let his experience bear constructively upon the circumstances in which he finds himself."

Justin Morrill College at Michigan State University

Dr. Gordon Rohman, Dean

The major goal of our first year at Justin Morrill College was survival. We gave birth of a college very rapidly. Within one calendar year--September 1964 to September 1965--Justin Morrill was suggested, investigated, planned, staffed, and opened. I do not necessarily recommend this as the pacing for creating an experimental college, but it is the pace at which things are usually done at Michigan State, and it has some advantages. I am convinced that I learned more in the doing of it than I ever could have learned in merely thinking about it.

Our goal was to work out a realistically ideal (or idealistically real) alternative to present patterns of undergraduate education in large universities. The problem, I think, is not size, but organization--what is the best way to use size? Michigan State is now actively involved in seeking patterns for the controlled decentralization of its entire undergraduate and graduate curriculum, and the creation of Justin Morrill College represents part of that search.

The decentralization--or organizational diversity--began in 1961 when it was proposed that we import part of the existing University College general education program into the living units then being built, to increase the amount of communal, college-type feeling. We now have seven such "living-learning" units. Each houses 1200 students. The unique feature is that there are classrooms and offices along with the usual paraphernalia of lounges, grills, and so forth, in the residence halls.

Essentially this was a subsystem of the existing curricular organization of the university. It remained for Justin Morrill College to take the next step, to have teaching going on within the living-learning unit, and to provide an alternative to the existing University College curriculum.

Justin Morrill College is called semi-autonomous. We share our faculty with the rest of the university under the principle of joint appointment. The joint appointment system affords us a pool of almost 2,000 teachers--a great diversity of talent and temperament--to make it possible for our students to look at things from all possible sides of the question. For the teachers, this is an opportunity to diversify their professional experience--working in a college context as well as in a departmental one, working with undergraduates when they formerly worked mainly with graduate students, and so forth. I only hope that there will be enough teachers who want to diversify their experience so that we will be able to survive!

The disadvantages of joint appointment are probably defects of the very virtues I have enumerated. Diversity can be a good or a bad thing. Bad if it introduces into the college such a radical discontinuity of talent and temperament that we lack all sense of community. Politically, the joint-appointment principle can put a teacher into double jeopardy, for he serves two masters, and the definition of excellence in his department may not only differ from ours, but it may contradict it. Finally, there is the element of time. A split appointment may actually mean a double load rather than a fractioned load, especially in terms of the hidden activities associated with faculty--advising, talking to students, preparing new courses, serving on committees.

The shared curriculum is the second characteristic of Justin Morrill that makes it semi-autonomous. About half of our course work will be unique to the college; the other half the students will take in existing programs in the university. What we are trying to do is to get away from what I might call the plateau principle which our University College operates under--that up to the end of the sophomore year a person is primarily committed to something called general education, and then he chucks all that and starts specializing. What we've tried to do is to spread our liberal general education program over the four years, and give the student the opportunity to do something different in all four years.

Many questions emerge with the split curriculum: Will our students be able to move from our curriculum pattern into the existing university curriculum pattern? What will happen to the whole lockstep of prerequisites? What about the pressures towards professionalization? Will we be able to attract and hold people who want to combine our type of residence-college curriculum with professional preparation? Finally will the possibilities for transfer within the institution and between institutions be harmed by our program? These are continuing problems.

What kind of a college are we? In an attempt to focus the entire enterprise on a general area of concern, we were given a theme: internationalism and the world community. Our maximum size was fixed at 1200. We are not an honors college, by design and by preference; rather, we are a self-selected college. Students come to Justin Morrill if they wish and they leave when they wish; the same with faculty. We seem to have attracted the strongest students in the university's entering class, and we seem to be holding them.

When I was appointed in April 1965, I was also commissioned to name the planners for the college. Because we were who we were, we paid particular attention to such things as independent study, a real degree of student choice, common experience, and flexibility of program. The big question, though, was how to design something that would survive in our system and maybe improve it.

We proposed to ourselves that if we began with the realities of courses and disciplines and experts, perhaps the most immediately useful thing we could do would be to try to direct the attention of the expert to the notion of his discipline as a "strategy of knowing." We all recognize that knowledge these days keeps no better than fish, as Whitehead pointed out; what we have to do, perhaps, is train students in the art of fishing. This is what we are trying to do at Justin Morrill.

We ask that each student work in at least three disciplines in the Humanities and three in the Social Sciences. We invite our faculty to teach on topics of their own choosing, the things they are most interested in and enthusiastic about. In return for teaching the topic of his choice, we ask a teacher to do explicitly what he has perhaps been doing implicitly for years--to use his topic as a case history in the discipline as a way of knowing.

Now we have a whole variety of topics and a whole variety of teachers in each discipline and we can give students a genuine choice. They must study in a certain number of disciplines, but they need not take any particular topic with any particular teacher. We are trying, in other words, to follow the principle of interest for both teacher and student. This operates directly in the Humanities and Social Sciences, and in the advanced courses in the Natural Sciences. (The beginning course in Natural Sciences is a year-long survey, adapted from the existing University College course.)

We have approached independent study in three ways. First, we have a student sign up for one hour of independent study credit, concurrently with each of his discipline-oriented courses. Each teacher is free to interpret what that means, in terms of his course, his discipline, his particular students. It may be something as simple as showing a student how to use the library, or something as profound as the students are capable of understanding or he is capable of presenting. In any case, it is a beginning in independent work.

The second kind of independent study usually comes in the junior or senior year. We ask a student to do a term's worth of credits in one of three options: working independently on campus, apart from his courses; off campus, in what we call a field-study program, doing one or another kind of community service in the local community or elsewhere; or overseas, in foreign life and study.

The third form of independent study is a required seminar, a "capstone" course, in which a student must approach a topic of his choice from at least two different disciplinary points of view, demonstrating his ability to do so through a thesis or some equivalent piece of work.

Our program in English Composition involves a weekly lecture, for which we try to recruit some distinguished member of the intellectual community, followed by small-group meetings of five or six students. Each group has what we call a writing coach--perhaps a graduate student in English or a faculty wife with appropriate training. They discuss the lecture, generate topics, write, and criticize the writing, students coaching each other as well as working with the writing coach. Correcting writing on the spot seems to work.

Finally, our international theme. The first year, we require an intensive language program--ten contact hours in French, Spanish, or Russian. Room assignments are such that students taking the same language room together, to build into the rooms possibilities for practicing the language. Then there are the language tables and clubs, and so forth, which characterize any language program that means business. As a result, our students will have (and apparently are getting, by the tests we're running now) two-and-a-half years' worth of college language in one year.

The overseas option for independent study is obviously another expression of the international theme. This summer we have three groups of students going abroad: one to Spain, one to Switzerland, and one to Russia.

We like to think that a third way we exemplify our international theme is through the communal or fraternal experience of the small college itself. If we can change attitudes in the direction of liberality and broad-mindedness and tolerance, we have helped students to live safely in the interdependent world of today and tomorrow. In these terms, we succeed by having helped the person who graduates become something distinctively different from the person he was when he entered the university.

To conclude, we have sought neither to be swallowed up by the university nor spat out by it; rather, to be chewed thoughtfully. I think the stakes are high. It is crucial that we improve the quality of organization and the quality of curriculum in the large universities. As they say, and as we believe, "that's where the action is."

Oklahoma Christian College, Oklahoma City, Oklahoma

Stafford North, Dean of Instruction; and others

Oklahoma Christian College is a four-year liberal arts college in Oklahoma City primarily supported by members of the Church of Christ. In the fall of 1965 it opened what *Time Magazine* called the nation's first fully electronic learning center.

The first floor of the center houses the college's library collection. The second and third floors accommodate 508 study carrels, each, or 1,016 in all. 710 were installed initially. More are being added as the student body grows, for the first principle of the college's plan for learning is to provide each student with his own individually assigned carrel.

Use of these learning carrels varies widely. Some students spend an average of four hours a day in their carrels, some make no use of it whatever, while others report use as high as eleven hours a day. Most, however fall in the three-to six-hour range.

The carrel serves a multiplicity of purposes. At its simplest, it is a quiet place to read or review notes, handy to the resources of the library. Students may also use a variety of new media. Each carrel contains a telephone dial. A student may put on a headset and dial three digits to hear a lecture on tape, one of a number of course materials scheduled to be available at certain hours of the day. To accompany the lecture, he will use a workbook with visual illustrations--drawings, graphs, maps, photographs, or charts--which the teacher wants him to see while he listens. The workbook also keeps him intellectually active by asking for responses such as filling in blanks, working problems, answering questions, and so on; or it may suggest some of the topics on which he could profitably take notes.

Thirty-six channels are reserved for course materials or other matter of high demand, scheduled at various hours during the day on a weekly timetable. One hundred additional channels provide materials of a resource nature, varying from recorded drama to language-laboratory tapes, from symphonies to interviews with political leaders.

Some of this material is simply to be listened to. For much of it, workbooks are the accompaniment. In other cases, learning aids checked-out from the equipment desk in the center must be used, such as an 8mm projector, or a tape-recorder (often used in conjunction with a dialed language tape).

A carrel for each student forms the key element in our program. It provides, first of all, an improved study environment--as if we had taken the piece of the student's dormitory room where he would otherwise do his studying and moved it into the controlled environment of the learning center. It makes available study facilities--equipment and materials--which it would be difficult to diffuse to every dormitory room. Second, it develops greater independence in study by providing a place where a student can study alone in a favorable environment. Thirdly, the arrangement seems to encourage more study. In 1965, before we had the center, students reported an average of 16.37 hrs. per week of study. This year the reported average was 19.44, an increase of three hours. I would not want to attest to the accuracy of the figures, but they were obtained in the same way each year.

Library usage is also up by a large percentage. This is due in part, I think, to the fact that the students spend a sizable part of the day in the building where the books are; and also because some teachers, in developing their courses for the new presentation, just did a better job of getting students to use the library.

One of the things in which we think we are pioneering is the combined use of tapes and workbooks. We use recorded lectures in which the teacher actually puts some of the course content on tape and then uses the workbook to present things the student needs to look at: such as quizzes to check his progress.

Recorded materials of various kinds have been available in libraries for a long time. Having them available in the student's own carrel, however, where he simply needs to dial three digits, obviously makes them used far more widely. The music appreciation teacher, for example, estimates that his students are listening to ten times as much music this year as last year, because of the accessibility of the material.

The combined audio-tutorial approach offers students additional learning opportunities, such as tapes coupled to film presentations. A student checks out a simple 8mm cartridge projector. He dials a number, and a tape tells him what the film is about and when to start the projector. The student then hears through his headset a commentary on the film he is seeing.

In helping faculty members develop materials to be used with these various new media, we first ask them to rethink the objectives of their courses in behavioral terms, trying to define the desired outcomes in specific and measurable actions or learnings. Then we ask them to consider the student's time. Here we do not depend on the usual pattern of two hours outside of class for every hour in class, but think in terms of the total amount of time available. We may say to a teacher for instance, that when a student enrolls in his three-hour course, he owns nine hours a week of the student's time. The teacher may structure four or five hours or whatever he wishes, with the remainder somewhat unstructured. But he is asked to do his structuring within this total nine available hours, not three hours in class and six out of class.

We hope that the faculty will consider the almost endless variations possible here: large and small group meetings, meetings with and without teachers, and independent study using the various media available in the student's carrel. To encourage full development, the teacher is given released time to prepare slides, filmstrips, and tapes, and to otherwise adapt his program.

Let me give you one example of an adapted program in which some of these variations have come into play. The course is English Composition. In a typical week the students will gather in a large group (about 75) on Monday without the teacher, to write themes. A teaching assistant is in charge. On Tuesday, they go to their carrels for a taped lecture on the principles of composition. Accompanying the lecture are certain exercises in the workbook. Wednesday, they meet again in the large group, this time with the teacher, for illustrations from literature of the principles of composition they were studying in their carrels on Tuesday. Thursday, there is a taped exercise on grammar and vocabulary for those who need it. Friday, they meet in groups of 15 with the teacher to discuss the papers they wrote on Monday, in a kind of group-counselling situation. In summary, five of the nine hours of student time the teacher has to work with have been structured. These hours have included large-group meetings, with and without a teacher, small-group meetings with the teacher, and two programs of tape-directed study. Four hours remain unstructured, to be used by the student for study and review.

All sorts of variables offer themselves. In Introduction to the Theater, the student hears two tapes a week. One may be a recording of the play being read that week, the other a lecture on the period of drama from which the play comes, relating the play to the background, with illustrations and questions, in the workbook. For two hours a week, students also meet with the teacher in discussion. Thus, instead of meeting three times a week, the course carries four structured hours, of which two are spent in meetings.

In Art Appreciation, the students hear two tapes a week. In addition to a workbook, they use a book of prints, and the teacher, in a taped lecture, may direct them to look at this or that picture. In another two-hour block of time, the teacher may opt for a number of things, including visits to nearby art galleries and museums. Again, four hours of nine have been structured, this time providing the possibility for activities that could not be carried out in the usual class hour.

Two matters require constant attention. One involves getting imaginative materials developed by the faculty, particularly programs which will allow for a good deal of individual variation. The second is to preserve the learning atmosphere in a building where there is always a fairly large number of students individually at work. We have a student committee to work with us in developing principles and guidelines. We are also trying different patterns of supervision.

Finally, two administrative matters deserve mention. First, the student is charged $30 a semester for his carrel, just as he is charged rent for his dormitory room. This encourages him to use it, and it is one of the ways we pay for the whole operation. Secondly, no faculty member is required to develop or redevelop courses for the learning center. We encourage it, however. We have conferences and bring people to the campus to help our faculty get ideas. We offer them released time. But they are not forced into it by any means.

MATERIALS FOR BETTER LEARNING:
AN EDUCATIONAL SERVICE

Franklin Patterson

Franklin Patterson is the president of a college not yet in operation--Hampshire College, to be located in Amherst, Massachusetts. As consultant to Educational Services Incorporated, he helped develop materials to be used in teaching social studies in elementary and secondary schools through working on important questions and issues.

Educational Services Incorporated, began as a small group of people working to make the Physical Sciences Study Committee physics program available to the high schools of America. Today it is a sizable institution with a $10 million budget working on a large variety of curriculum projects. An incomplete list includes programs in science for elementary and secondary schools, programs in the social sciences at similar levels, a project in arithmetic, a precollege program for students from low-income families, college-level programs in physics and teacher education, and a number of programs to improve education in Africa and Asia.

Some of the premises of ESI as I see them are these: 1) that there are generalizations and insights about the universe worth examing; 2) that the richest source of these lies in the various disciplines of inquiry; 3) that the generalizations and insights of the disciplines should be as accessible as possible to as many as possible; 4) that accessibility comes through education in which learners discover generalizations and insights--their own, not necessarily someone else's--through experience in the actual process of inquiry; 5) that this inquiry should be based on experience with specific events and specific observations; and 6) that, therefore, curriculum reform lies in clear ideas, honest materials which allow the learner direct experience in inquiry, and provision for engagement with such materials and ideas.

The ESI Social Studies Program offers a fairly typical case of the application of these premises. It originated four years ago in a conference called by the American Council of Learned Societies and supported by the Ford Foundation. It was a pretty bloody affair--more of a dogfight than a conference. But out of this cataclysmic meeting of about forty people from all kinds of fields came a small interested group who have continued to wrestle with the problems of social science and humanities curricula. From their work has come a three-phase social studies program.

It is important to point out that we are not building a uniform national curriculum. Rather we want to see what can be done in a fairly free environment to help children go through the process of inquiry in relation to some clear ideas. Whether we will succeed or not is still quite open to question.

For the elementary school years, Jerome Bruner and others are developing a course of study to be used at about the fifth grade. The topic is Man--not the garbageman or the friendly postman, but Man. The three questions about Man which the children are being asked to deal with are questions you might like sometime to wrestle with in a graduate program: What is human about human beings? How did humans get to be human? And how can man become more human? The lines of inquiry suggested have to do with cultural evolution: that man becomes human, for instance, via toolmaking, via language, via social organization, via a prolonged childhood, and via his own urge to explain, to develop myths, to develop cosmologies of various kinds. The materials the children use are all quite original and quite new. They are limited to three different cultural groups: an eskimo tribe, the bushmen, and the baboons. One of the basic notions in Bruner's pedagogy is that for American ten year olds, an opportunity for contrast, for the comparison of one's own self and society with greatly different though not necessarily bizarre groups, can provide the kinds of insights that promote social development.

In the junior-high section, which I've been working on, we are concerned principally with the application of some political science concepts. We hope children will learn three kinds of things: something about generalization, some insight about the nature of causality and its complexity, and about the process of judgment or valuing. Recent studies show that the school is the most important influential agent in what the political scientists call the political civilization of people, so we thought it might be appropriate to see what could be done in a fairly direct approach to some sophisticated political-science ideas.

There are two of them, closely related, dealt with in this three-year sequence. One is the idea of power as a general social phenomenon. The other is the idea of political culture--how people think and act about power and power relationships. The lines of inquiry have to do with why we have power relationships in human society, how we protect ourselves from excesses of power in the hands of other people, how power survives, how it sometimes sickens and dies; why political cultures are different in different times and places, why they change over time, and how they are related to technology, to economic systems, to language. Our materials come from 17th and 18th century English and American history: we present the children with documents in one way or another related to the transition in political culture in England and America between the death of Elizabeth I and Jefferson's inauguration.

On the high-school level, the philosopher Morton White is working on a program in which the inquiry is about the impact of science and technology on human society. He has chosen three case studies, not contemporary but encapsulated in time sufficiently so that one can walk all around them, as it were, and see what each adds up to. One is the phenomenon of the steam engine, why it occurred in human history when it did and what its consequences were. The second has to do with the transformation over thirty years of the English city of Manchester as a consequence of the coming of steam power. The third is concerned with Charles Darwin: why he, rather than Erasmus Darwin, for instance, came forward with the theory of natural selection, and what the consequences of this revolutionary theory were in his society.

These programs are designed to try to put students in the position of being historians, being political scientists, doing social science rather than just hearing or reading about it.

I wonder what implications for higher education there are in the ESI experience. I would postulate three things that may be worth thinking about. The first is that substantially supported noncommercial research and development in curriculum is practical. Title Four of the Education Act of 1965 testifies to this: it is there in great part because the House and Senate committees saw ESI as a workable prototype. Second, ESI demonstrates that people in the disciplines can become profoundly and usefully engaged with questions of pedagogy. Third, it can be a demonstration that innovation can be attempted directly in terms of the ideas, data, and inquiry modes of the disciplines themselves.

I should point out, however, that neither institutions nor departments nor divisions, nor any of the apparatus of the established status quo in colleges and universities, shows any interest in ESI. Our help comes freely and generously from leaders within the disciplines, not from the organizations they may be connected with.

Finally let me suggest that what's been happening in high schools in the last ten years is bound to have consequences for us at the college level. Our materials involve a great deal of independent study; indeed, the students around the 8th grade (we tend to think in ungraded terms) teach themselves and each other most of the time through working with problems, with materials, or on some of the games we have developed. Yet no one is doing anything very substantial in terms of a self-taught curriculum at the college level. And this, after all, really is the essence of education.

ATTACKING THE ISSUES

Nevitt Sanford, Director of the
Institute for the Study of Human
Problems at Stanford University.

This conference strikes me as having been quite friendly, congenial, enjoyable, stimulating--unlike other conferences that I have attended! I think it's because most people here are in the same general church. I contrast this with a conference I attended on the occasion of the publication of The American College. About 100 leading East Coast educators were present. The conference immediately turned into a set of skirmishes between those people who were interested in students and those who represented traditional education. I think that on the whole we have behaved better. It probably has something to do with the presence of students--they help put us on our best behavior.

But I believe also that the times have changed a little. I have the impression that the discussion of educational issues is in fact on a higher level than it was some years ago. I hope this has something to do with our intellectual growth; I'm sure it has something to do with social change. Certain kinds of issues are being forced upon us that can't any longer be ignored.

This conference has brought forth many stimulating and, on a certain level, new ideas. But fundamentally I think it has addressed itself to the same issues that all conferences on education have addressed themselves to. For instance, are we here to discuss fish or the process of fishing? Are we to teach what students are interested in, or we to expose them to ranges of experience in which they might become interested? What are young people like, and what in the world can we do with them or for them or to them? Then there are the questions of pluralism or diversity vs. universality in value orientation, of the individual's responsibility to himself and his responsibility to society, of the relations of man and society, the nature of society and of man, and so forth. These are the perennial issues, and it seems to me no wonder that some educators have thought to make them fundamental to a curriculum.

The question I would like to discuss is whether we could bring these issues more into the open and resolve some of them through further inquiry, through research of the right sort, and through the application of concepts in the psychological and social sciences. I think we can.

Consider the area of the person and how he develops. We are still faced with the conception put forward by the behaviorist psychologists of the person as a vast aggregate of response readiness, waiting to be touched off by particular stimuli. I have the impression that this conception underlies many of the technological advances in education. But such a model tells us nothing about how to unlearn things, and I take this to be one of the major problems of education.

Related to this is the ancient issue of fixity versus change in the person. When we think of educating the culturally deprived youngster at the college level, we have to accent the possibilities for change. On the other hand, if we don't pay some attention to those structures in the person which have a long history and resist change, we're likely to be disappointed. What we need, I think, is a model of the person that will somehow permit us to speak about persisting structures but also inquire how they can be changed.

We need a theory of development that tells us something about the timing of events and about the possibilities of different things occurring at different times. This might give us perspective on the timing of radicalism in people. Do we produce a mature radical, the kind of adult our society needs, by having a radical freshman? Or do we do it by starting with a naive freshman who gradually begins to ask questions about society and discovers the joys of radicalism late in the game, perhaps at the graduate level? This brings up the whole question of curriculum: do we begin with the big contemporary social issues, or do we introduce them later, after the study of great ideas, for instance?

We need a conception of the person that will enable us to see how he finds place within himself for things which at first seem contradictory. How does he come to be able to function autonomously but at the same time incorporate within himself things that are there in society?

So we have to go on studying students and their development, and in a more intensive way than we have done so far. We have to be guided by theories about what persons can become and how they are to become that way. We have to study students without experimenting on them, they tell us; and this means, I think, that we have to have a conception of psychology and social science that is a little bit different from that which generally prevails. We must design our work in such a way that the activities planned to yield knowledge are at the same time activities which will benefit the student. I have the notion that you can't really separate significant inquiries about education from action by dedicated persons--experiment just for the sake of experimentation is quite ridiculous.

The dedicated person believes that his experiment cannot fail. He doesn't wait around to see how it comes out, and I'm happy it's that way. If it makes it more difficult for the social scientist to learn things, why so much the better. One can still keep track of what happens and make some discoveries about how to do things better.

The issue of value conflict came out rather sharply in one of the workshops. How can we realize a given value without sacrificing other values? We have the value, for instance, of educating more and more people, which is very likely to lead to a kind of homogenization of American education, I should say. But at the same time we have the value of preserving small unique colleges which may be our main bulwarks against galloping homogenized technological training. How do we resolve such conflicts? Can we find projects that serve both apparently conflicting values?

I've heard expressed here a rather dim view about the possibility of modifying big institutions. I don't think we should be so discouraged about that--we'd better not be, because there are big institutions that must be modified; they're where most of the people are. Let's accept the notion of holism for a moment. If it's true that you can't change anything in an institution without changing the whole thing, then it's probably true that if you can find the right places, the soft spots as it were, a little change can make a big difference.

Well, as I say, these are the old issues that have continued to raise their heads. But I think there have been some really new points of focus at this conference, too. One of them is universal higher education: now a reasonable idea to entertain, given the state of things in our society. The thing about this that I think is just great, is that it forces us to ask ourselves the fundamental questions about education--what we want to do, what the students are really like, and how we can devise educational procedures that really speak to their condition.

Another new and great thing is that these pressures for more and better education force us to consider what some of the students were suggesting: that in our society of the future, practically everybody will have to be an educator, just as practically everybody will have to continue to get educated.

This reminds me of another new focus. I'm inclined to look on student unrest and student activism--whatever we choose to call it--as a major source of energy for educational reform today. The question is how we can best mobilize it. I'm for getting protest organized around goals that seem to me to be the right ones! This is not too unpromising, I think: as I understood the students the other day, they are not about to reject the concept of the professional educator, but they want to rebuild it, to conceive of the educator as someone who understands students and knows how to work with them.

Finally, I think we have to think big and boldly. We have to address ourselves to big institutions and to the whole society. We have to more experimentation from places such as the Union colleges into the mainstreams of American higher education. I would like to see the people assembled here take the lead in formulating public policy for American higher education generally. Nobody is better qualified to do it.

We need to think boldly because today's wild idea is tomorrow's reality. Institutions--even universities!--do change in response to changes in society, sometimes too much or in the wrong ways. But the innovations that are going to live are those that are somehow in keeping with what is already happening in society. For that very reason, I think we have grounds for optimism today, for society is demanding that educational institutions really give some attention to the great social and human problems that we see everywhere, including the problem of improving teaching so that we can get out of the grasp of an all-embracing technology and retain some elements of humanity.

Colleges and universities have, up until now, behaved as if this were still the middle 1950's when there was a shortage of young people and a terrific need to hurry up and produce people to man the machinery of society. The established institutions made hay during this period. All the departments upgraded themselves, all the researchers get money for research--they did all the things they wanted to do without any attention to the needs of students. Now students and the parents have caught on to this and they're demanding a change, that a little attention be given to their needs and to the kind of activities that have for them social and human significance.

It is our job to respond. Happily, there are now forces in the society moving, I think, in the right direction. Let us see if we can shape those forces just a little bit to the human ends that we all seek.

The Seven Workshops

DIMENSIONS OF CHANGE IN HIGHER EDUCATION

The First Conference on Innovation, held May 19-23, 1966, at Magnolia Manor, Mass., under the auspices of the Union for Research and Experimentation in Higher Education.

- Smallness in the large institution
- Developing independent learners
- Redefinition of disciplines
- The small experimental college
- Education for Inner-City youth
- College libraries of the future
- Proposals for experimentation

Conference Reporter, Will Hamlin

Edited by Will Hamlin, Goddard College,
and Lawrence Porter, Antioch College

WORKSHOP #1

PROBLEM: Maintaining the benefits of smallness within the large university.

WORKING PAPER: Rutgers University.

GENERAL STATEMENT: The major state universities in this country have already reached or are rapidly expanding to sizes that discourage educational reexamination, let alone innovation. There is a steady growth of curricular rigidity as the administrative machinery becomes more and more cumbersome. In the mammoth university the individual faculty member becomes as anonymous as the individual student.

And yet the growth of these state universities has highly desirable features as well. It offers exciting opportunities for creating new programs and majors, for developing graduate work and research, and for supporting all kinds of facilities and activities unthinkable to the small institution.

ILLUSTRATIONS: The Academic Plan of the University of California, Santa Cruz. The Santa Cruz plan takes as its point of departure the conviction that undergraduate education may be restored to a place of dignity and importance in the University. It also reflects the belief that the challenge to the statewide University to grow is a challenge to variety and experimentation. The plan will stand upon two pillars: the residential colleges which are responsible for undergraduate education, and a divisional structure concerned with research, graduate study, and professional training.

All undergraduates, including commuting students, will be members of a college; so will most members of the faculty. However, no student will study entirely in his own college.

Every college at Santa Cruz will be devoted to the idea of a liberal college education. Each college will have a different "emphasis" arising from its having a slightly larger number of faculty in one of the major disciplines than in the other two. Each will have a different curriculum, reflecting the educational philosophy of the faculty. Each will have a different "personality" stemming from the particular interests, outlooks, and characters of its Provost and faculty. Each will have a different appearance because both the sites and the architectural design will differ in every case, although the fundamental concept of a scattered but unified group of buildings will apply everywhere.

The Twelve-College Plan of the University of California, San Diego. To offset the loss of human scale and feeling in the huge university, the University of California in San Diego is divided into twelve colleges. The difficulties of such an arrangement are listed below:

A. Problems related to the emphasis upon research in the university

    1. Where should research institutes and laboratories not used for undergraduate instruction be placed with respect to the campuses of the college?

    2. How does one preserve proportions among the areas of learning in the college?

    3. How does one deal with the growing number of non-teaching research personnel who take up space in the college and in one way or another impose their style and values upon the academic community?

B. Problems relating to the character of the faculty

    1. How does one recruit for the university men and women with sustained experience with teaching in a liberal arts college?

    2. How does one prevent the penetration into undergraduate courses of the narrow professionalism, abstractness, emphasis upon memorizing, and remoteness from the students' experience which characterizes the first two years of graduate work?

    3. How does one persuade the faculty to spend more free time with the students?

C. Problems relating to establishing and preserving the identity of the college

1. How does one avoid expensive and needless duplication of courses among the campuses?

2. How are commuting students made to feel a part of the small college?

3. What is the relationship between the college administrators and the Dean of Students?

4. What kind of student organizations should be university-wide and what kinds limited to specific campuses?

Alternative Patterns for Organization of the Arts and Sciences Disciplines in the New Brunswick College. Two basic alternative patterns have emerged for organization of the academic disciplines in relation to the residential colleges. One of these envisions a disciplinary group subdivided among the colleges for purposes of undergraduate instruction but acting as a unified "division" for the purposes of the overall interests of the discipline. The other envisions the faculty members in a discipline as members contained within a single college for undergraduate instruction, but operating as an inter-college "division" with respect for graduate instruction if there is a graduate program in its field.

While each of these models seems suitable for a number of disciplines, it will clearly be necessary to make numerous adaptations to accommodate all the special situations presented by the various fields, and certain additional prototypes may have to be developed.

WORKSHOP REPORT: We quickly discovered that the basic implication in the workshop topic was unacceptable to the group. We can see no inherent advantage in the small unit--it is possible for a small college to provide an unsatisfactory education, and it is possible for an institution of many thousands to provide an excellent one. We believe that the essential prerequisite is not a small student body but certain attitudes and some organizational approaches.

We came to see that among the things that are required are:

a) Some feeling of common purpose among all those in the institution, from which comes a sense of involvement and community;

b) A willingness to reexamine continually the purpose and effectiveness of the curriculum; and an organizational structure that makes this reexamination easy;

c) The possibility for any member of the community to feel that he can influence it without undue effort;

d) Research into the college as a social unit;

e) A determination that the effects of expansion should not at any time go unconsidered.

We can see that some of these aims may more easily be met if the number of people involved is not very large, and we believe that the experiments that involve the establishment of campuses in which the body of liberal arts students and their faculty is broken up into units of a few hundred or a few thousand should be followed closely. We are not unanimous, however, in the belief that new formal subdivisions (colleges of one kind or another) are essential, and some of our number prefer to rely on the usual structure and to work for a sense of involvement through such units as the department or the dormitory. Some others prefer the third approach, exemplified by the Tussman program, of having a special unit within the large institution, working through its special faculty toward a more liberal education.

We see as obstacles to the achievement of our aims such things as:

a) The pressure of many disciplines to organize the curriculum as though all students were heading for graduate school;

b) The present "reward system", which seems to pay insufficient attention both to teaching and to involvement in the life of the institutional community, whatever that community may be;

c) "Lack of visibility" on the part of faculty and student alike, especially in a rapidly expanding institution;

d) The absence of effective channels of communication.

Above all we believe that one should never underestimate the potential dangers of unexamined expansion. We recommend strongly that universities in the process of rapid growth give serious consideration to appropriate changes in their institutional organization.

WORKSHOP #2

PROBLEM: Developing independent learners in a liberal arts college.

WORKING PAPERS: Loretto Heights College and Stephens College.

GENERAL STATEMENT: The prime task of higher education today is to develop learners capable of functioning independently in a world where change will be the prevailing condition. The ability to educate and re-educate oneself professionally will be a necessity for many young people in college today. No person can master the vast store of knowledge which presently exists, and much factual information has only short-term value; yet one must be able to master certain segments of knowledge at various stages of life. It thus becomes vital to know how to operate as an autonomous learner.

POSSIBLE APPROACHES: 1) What are the skills and understandings needed for independent learning and how can these be fostered in the college environment? 2) What steps can a college community undertake to bring the total college effort into focus on the development of the independent learner?

ILLUSTRATIONS: The Teacher in Autonomous Learning, Stephens College. It takes longer to develop independent research habits than to develop content and skill competency. Teacher must be a guide, neither a crutch nor a collaborator; needs no special training. "Anyone with sufficient mental adeptness to become and remain a teacher in an experimental college is already adequately equipped. Nothing will kill faculty support so effectively as an in-service training program." Teacher will operate as dialogist, and this requires "a greater degree of equality than in even informal seminars." But "new information brings new decorum." Teaching for autonomous learning may often mean sacrificing breadth to depth and accepting changes in student goals. Curriculum must be flexible. Time is important and "autonomous programs can be effective only when the teacher's contact-hour load is proportionately reduced." Administrator will bear a heavy load deciding what teachers should work in such a program, and with what students on what kinds of problems.

Personality Characteristics of the Independent, Autonomous Learner, Stephens College. Heath's study of Princeton students identified the "Reasonable Adventurer" (who appears to be an independent and autonomous learner) as being characterized as: a) intellectually alternatingly curious and critical; b) similarly alternatingly involved and detached in his friendships; c) relatively independent in value judgments; d) tolerant of ambiguity, relatively free of black-and-white thinking; e) having an "uncommon interest in the commonplace . . . more is seen, more is felt . . . the least likely problem is boredom." Such a student resembles Maslow's "Self-Actualizing Person"; persons defined by Peck in his University of Texas study as at the high end of the mental health scale; and Steiner's description of the creative person. "They are all describing a process of personality development which is reaching towards freedom from encapsulation."

Does a college recognize the attributes that are associated with such individuals? Is the faculty committed to developing autonomous learners? Will its members reinforce autonomous behaviour? Do we have a viable theory of social learning to help us modify the out-of-class environment? Finally, is it all worth the trouble? Royce says, "such an open approach to life is very risky for the individual man in the short view [but] it is clearly more creative and productive, and therefore more viable for all men in the long run."

The Tutorial and the Development of Independent Autonomous Learners, Stephens College. Students at Sussex University in Brighton, England, take two tutorials a week instead of courses. A tutorial involves a teacher and two or three other students. Its purpose is: 1) to get students into the habit of working independently and assuming responsibility for learning; 2) to get them into the habit of writing, sharpening their formulations by putting them into statements which they are prepared to defend; 3) to get them into the habit of using the library as a resource which they can exploit for their purposes. "If the freshman tutorial is done properly, we don't have to worry about students for the remainder of their college education.

The lecture does not initiate the student into the sort of activity which produced it. The tutorial can do just that, becoming a model for the student's behavior as an intellectually active person. At Sussex, "the teacher becomes the student's friend . . . bound to the student even if he learns nothing." They consider this basic for the success of the method. Probing must characterize the tutorial, and "it is important for the teacher to help the student see what the arguments are." But it is immoral for the teacher "to bring the force of his personality to back the arguments or to become emotionally involved in refuting student points of view."

Faculty load is 12 hours a week of face-to-face teaching of which 9 are likely to be in tutorials. The tutorial group of two or three students meets the instructor an hour a week, bringing prepared, written statements. Usually the student reads his paper as a basis for conversation about the positions taken and the points made.

Such tutorials differ from independent study as it is usually conceived of in America in several ways: 1) Independent study usually aims at coverage of subject matter; "the tutorial is ideally aimed at inculcating in the student an appreciation for the style, approach, and methods characteristic of an area." Thus sessions are not quizzes (either by the teacher or by the student) about content; they are more like probings of the soundness of argument or of the methodology used. 2) American teachers typically get their ego enhancement from showing off their erudition. The rewards to the tutor, on the other hand, "come through identification with the student, his growth, progress, and successes [and] . . . from becoming sufficiently good at tutoring that more students ask for him as a tutor than he can accommodate."

The system, says Patrick Corbett in The Idea of a New University--An Experiment in Sussex, is to oblige the student "to adopt an active rather than a passive attitude to learning." The lecture and the large group class can be used in later years "to save teaching time that can be devoted to beginners" through tutorials--"just the reverse of what is practised in most universities."

A Brief Survey of Student Opinion on Independent Learning, Stephens College. Stephens students felt that only those students who excel in responsibility, self-discipline, the ability to think, and self-knowledge could successfully undertake independent study. Individual independent study should not be allowed until the final two years, the students said, and there must be prerequisite courses "so that a student can gain the background necessary for specific independent study." This might mean a required program "which a young student may rebel against but accept with more maturity." Candidates for independent study should apply to be admitted to it, not be picked by someone else. Group independent study might begin on the sophomore level, as preparation for more specialized individual independent study on junior and senior levels.

The students "were very critical of written examinations and unanimously called for oral examinations." They asked for evaluations rather than or as well as grades, and "earnestly asked for a careful analysis of the problem of transfer of credit for independent study."

The Development of Autonomy, Project on Student Development in Small Colleges. "My first point is that the development of autonomy involves three major dimensions of change: the development of emotional independence, the development of instrumental independence, and the recognition of interdependence. My second point is that such development in the college setting is influenced by teaching practices and objectives, by curricular flexibility, by significant off-campus experiences and responsibilities, by opportunities to assume responsibilities within the college community, and by the quality of relationships with older persons."

Emotional independence means becoming free of the need for support of parents, peers, and institutions (among other things), leading to some venturesomeness and an "increased ability to risk loss of approval and affection." Instrumental independence has to do with the ability to do things intelligently, to cope, and to be mobile: to move freely about, "to escape a bad situation or to get to one that looks more promising." "Development of autonomy culminates with recognition of one's interdependencies. It is realized that parents cannot be dispensed with . . .; that one cannot . . . be supported without working for it; that the benefits of a social structure cannot be received without making some contribution to it; that loving and being loved are necessarily complementary."

A college can contribute to these three traits or it can impede their development. What goes on in the classroom may elicit active search, planning, and evaluation, or it may not. A college can have a structure in which students are asked or required to do responsible work off campus, or it may pretend that this has nothing to do with education. Life on campus may be sheltered and regulated by remote administrative officials, or it may ask students to work out and implement controls in some kind of collaboration with concerned faculty members. Buildings and grounds may be manicured by paid professionals, or their care may be the responsibility of the persons who use them. In short, the people who operate the college and the ways in which they operate it can have important effects on students, aiding or retarding the development of autonomy.

Independence from What and for What End? Loretto Heights College. Independence in inquiry must be transformed from its current status as a goal of higher education into the principle methodology of higher education. This means that we have to work towards independence from: 1) the limitations of instructor, course, and textbook; 2) a constantly decreasing proportion of the knowledge and experience possibly available in a given discipline; 3) a primarily passive role in the learning process; and 4) established patterns of inquiry and thought.

We must at the same time work for independence for: 1) intellectual survival in an exploding world of knowledge; 2) human competence for unforsee able problems; 3) initiative and effective service in a constantly modified social context; and 4) the possibility of creativity.

A transformation "regarding student independence is not possible without a corresponding transformation in teacher functioning . . . he can no longer be the student's major source of information or the primary impetus to student thinking. . . It is the teacher as master learner who can meet the needs of today's students and contribute to the achievement of the possibilities of student independence in learning."

In conclusion, "independence in inquiry must assume a crucial role in higher education for the future, and this will require transformation of what such independent study is and how it is to be conducted . . . [and] in overall thinking about the college, the teacher, the student, and all of the things that happen when the three are brought together."

A Student View on Developing Independent Learners in a Liberal Arts College, Loretto Heights College. "I propose the creation of a community spirit on campus, i.e., administration, faculty, and students united in a common spirit of academic endeavor and social participation . . . The educator must be shocked into realizing that he is not asking the right questions. If the faculty member does not know that the student body is caught up in important elections, tallying of questionnaire results about later hours, or stands on Viet Nam, then the seminar meeting will be meaningless for the students. If subject matter cannot be related to life as the student and his peers experience it, what value can it have beyond the grade on the transcript?

". . . The college has to decide if it is going to be an educational institution or a babysitting establishment."

". . . My final proposition is . . . that college provide some way of allowing students to live on campus during a year when they would be freed of classes and could research and read and experiment wherever they wished . . . The ultimate end would not be a research paper on any narrowly defined point, for this would be contrary to the purpose. Freedom to roam as the personal intellect suggests, not as an assignment demands, is essential for an independent thinker.

"I also suggest some means of off-campus study."

". . . I realize that this paper does not give any of the much-needed answers to curriculum change, use of already existing buildings, and teachers who are untrained in this educative technique, but only long discussions and open college communities can work out the details."

A Commentary on the National Convention of the National Society for Programmed Instruction, Stephens College. Programmed instruction is no doubt here to stay, but there is a cult growing up about it with the accompanying absurdities that might be expected. A serious shortcoming seems the theory that all behavior is based upon the choice of alternatives. "By way of illustration, it could be assumed that most students would prefer to watch television than to work algebraic problems. However, if these individuals were permitted to watch television only after they had completed a mathematical assignment, the probability would be that they would do their homework." There is, however, a greater recognition that the learning process has many variables, and the more sophisticated programmers demonstrate great adaptability. "There is a general acknowledgement that much of the material which is currently labeled programmed instruction is boring to the point of being insulting to anyone other than a six-year-old with a pointed head."

There is some promise. "We are just beginning to scratch the surface of educational techniques which will possibly revolutionize the schools within a generation, and the most likely instrument of this revolution is computer-assisted instruction . . . simpler procedures in programmed learning will have to be employed in the meantime . . . The college, if it is to be meaningfully related to this development, both as contributor to and recipient of its values, will have to assign the task of keeping abreast of it to someone for whom it is his major responsibility."

WORKSHOP REPORT: Our workshop group views the broad goal of liberal education as the development of autonomous learners.

We feel that all students have the potential for becoming autonomous learners. In many instances, however, earlier life experiences may have retarded the developmental process. Both remedial and progressive efforts are necessary to maximize the possibility of generating independent learning and thinking in the largest possible number of students. Furthermore, we need ways of assessing the developmental levels of our students when they arrive at college, and to offer them solid institutional support during their campus careers.

Early in the workshop, Richard Suchman of the U.S. Office of Education presented his "inquiry" model. This experience confirmed the group's impression that a theoretical model is of primary importance in planning for educational innovation.

Commitment to the goal of producing autonomous learners seems to have far-reaching consequences for the definition of the total college environment. Changing the expectancies of faculty, students, and administration, emphasizing the role of process, and tolerating diversity and idiomatic styles are among the two dozen items seen as having an impact upon the college.

Specific procedures for initiating programs must reflect the uniqueness of each educational institution. Yet, any college committed to the development of independent learners must have mechanisms for both instituting and revising the program. The group believes that the entire college community has to be represented during implementation and evaluation on a continuing basis. Consequently, the workshop did not culminate in specific action proposals. Both teams (Loretto Heights and Stephens College) expect to develop such proposals and to feed them through their institutional hoppers. Some of our deliberations should be reflected in programs initiated this fall.

The group had good rapport but conflict on some issues developed. Questions of definition, institutionally conditioned views, and the allocation of scarce resources (i.e., a chance to talk) were the most frequent sources of intra-group differences.

Our last major group undertaking was to list in a freewheeling session some of the conditions that should be present for maximizing the development of independent autonomous learners. The list which follows is taken from the recorder's notes:

1. The development of autonomous learners should be the expectancy of teachers and students alike.
2. Objectives should be redefined in terms of this goal.
3. Faculty job descriptions should be reconstituted in terms of this goal.
4. Motivation for learning and responsibility for conduct should be given back to students.
5. New faculty should be selected in terms of their capability to move students towards this goal.
6. Students and faculty members should be rewarded for success in this endeavor.
7. Courses and curricula should be modified to meet the overall objective.
8. The campus environment should be modified.
9. Institutional practices and procedures should be reviewed in terms of their relevance for producing autonomous learners.
10. The whole campus-college community should be considered part of the necessary conditions for developing autonomous learners.
11. Sensitivity to and appreciation of idiomatic qualities in both teachers and students should be maintained (including preservation of valid existing faculty patterns as necessary).
12. Diversity should be valued and made useful to the college community.

13. A program of planned evaluation should be developed.

14. Maintenance and estension of extra-institutional involvements should be expected (off-campus programs, larger-community relations, etc.)

15. A student arm of The Union for Research and Experimentation on Higher Education should be anticipated.

16. Faculty should be accessible to students at central points in their development.

17. The student's present level of development should be assessed along with his potential for growth.

18. Criteria for admissions, grading, probation, and graduation should be reviewed.

19. The need for DIAL (Development of Independent Autonomous Learners) should be recognized and the structure made as "world real as possible."

20. The institution should make room for student trial and error.

21. Process and content should be seen as indivisible. Content is not diminished in value by recognizing the importance of process.

22. Content standards should not be sacrificed.

23. Inquiry should be directed to meaningful (important) ends.

24. Definition of the relevancy of ends should also be considered as important.

25. The autonomous learner is like the genuine scholar, so "Go with the scholar and you make it."

It would be appropriate to conclude this report by noting that the conference in general and the workshop in particular have been characterized by cooperative faculty-student relationships, by candor, respect for divergent views, and tolerance for ambiguity. These qualities can serve as a model for future effort at our home institutions.

WORKSHOP #3

PROBLEM: To investigate the implications of a possible redefinition of disciplines as a way of approaching liberal education.

WORKING PAPER: Goddard College.

GENERAL STATEMENT: The word discipline is usually used to signify a subject area in which a teacher is considered to be a master. The area is broken down into separate subjects which are then arranged in sequences to make up a curriculum. Student and teacher are expected to work through a sequence with the aim of mastery. It is assumed that "sufficient effort for the few will open up a future of graduate study and work in a profession. The rest will attain the benefits of exercise in critical thinking and personal development that will bring greater intellectual and aesthetic satisfactions in life."

These assumptions have been questioned. Instead it is suggested that such things as "an attitude towards experience . . . the habit of rational thought" and the development of individual style are the disciplines, not the subject specialities of the teachers.

POSSIBLE APPROACHES: "A new approach to liberal education suggests that the disciplines should be thought of . . . not as knowledge but as the controls the student develops in using knowledge . . . such as creating, problem solving, decision making, valuing, developing personal style."

ILLUSTRATIONS: Redefining the Disciplines: "George Gallup suggested some years ago that enough is known about learning to circumvent our roundabout way of teaching, to train directly the controls of perception, concentration, organization, objectivity, problem solving, decision making, and creativity. Others have added empathy to the list. A simpler list of five self-disciplines that derive from expression of fact and feeling in action includes creating, problem solving, decision making, valuing, and developing personal style." Each of these suggests operations students and teachers may perform together, so that the student becomes more fluent in his ability to transform his perceptions into actions. These operations may become the basis for a curriculum of experiences in which the student engages, "to develop skills in expression, responsibility in meeting problems and decisions, confidence in changing personal values and styles."

Redefining the Disciplines: "The Examined Life." "Increased competence in the 'New Disciplines' is seen to depend upon regarding them as figure rather than ground, pursuing them consciously and directly as goals rather than incidentally and indirectly as by-products . . . The more areas of living that are examined in this new light, the more likely it seems that development through reality testing will occur for students (and for faculty!)."

This implies the possibility of rearranging the life of a college to emphasize "confrontation and dialogue" about student concerns, from dormitory living, sex, and drugs to graduate education and current national and international social problems, these matters to be consciously approached through such disciplines as problem solving, decision making, valuing, etc. Graduation requirements might involve a student's demonstrating his competence in "each area of the new disciplines." Such an experiment would demand a wholesale commitment by faculty.

Redefining the Disciplines: Curriculum and Evaluation. Were such an experiment to be undertaken, what would be the college curriculum? Perhaps it would involve The Languages, as media for creative disciplines and for developing style; Problem Solving Opportunities in the natural and social sciences, in various kinds of research, in community action, all of which might involve the discipline of creativity as well; Decision Making Opportunities in the behavioral sciences, political action, life in other cultures, and various campus and off-campus responsibilities, many of which would also demand skill in determining values; Valuing Opportunities, using materials where comparisons and judgments must be made, in history, literature, or philosophy, for instance, or in the study of cultures; and Opportunities for Developing Personal Style in creative expression, in the ways in which one takes responsibilities, in how one plans and evaluates, etc.

A new form of evaluation might suggest the elements of the new disciplines which the student and teacher are aware of throughout their work together. "A form for writing the evaluation and the record derived from it might ask for full and clear evidence of occasions demanding creativity, problem solving ability, responsibility for decisions, expression of value, and critical approaches to style." The meaning of a liberal arts education might then be "determined by evaluative evidence of changes which both students and teachers recognize as development of disciplines."

"Whatever the college seeks to measure and credit seems to be the message that gets through to the student. It has often been shown that getting good marks is a game of finding out what will please the teacher . . . Is it possible in four years to teach the student how to plan and evaluate his own work so that it appears to him his own creation--something projected, criticized, and tested until it is worth living with? Educators keep saying it is not what one learns but how one uses what one learns. How does one identify this ability to use?"

A Personal Framework. One faculty member saw the new disciplines as part of a scheme in which they are the expressions of intelligence and communication skills developed as a result of basic growth and security needs, within the context of man's social nature and his unique symbolizing capacity. Such disciplines are developed through three kinds of learning experiences, called formal, informal, and technical, the technical or analytic and the informal or vitally involving being considered the most valuable. Necessary to learning is feedback or a self-reflexive characteristic through which one uses one's developing competencies to examine their development.

WORKSHOP REPORT:

Primary Issues

1. What does discipline mean to the student?

2. The relative centrality of traditional subject areas and the new disciplines conceived as process.

Direction of Discussion

1. Problem of narrowing the limits of ambiguity to the point of workable communication regarding the nature of the new disciplines.

2. Curricular organization in relation to these processes.

3. Can breadth of exposure also be acquired through the new emphasis on process?

4. Relative responsibility of teacher and student in determining the nature of the educational experience.

5. Possibility of evaluation of these new disciplines.

6. Other college programs as alternative ways of realizing student potential.

Projections

1. Possibility of a Union sponsored "experimental graduate school."

2. Better use of new members of the college community as sources of new ideas, stimulation, and institutional change.

3. Educational relevance of traditional "introductory" courses.

4. Can attitudes and approaches of experimental colleges be used to help solve the problem of mass education?

WORKSHOP #4

PROBLEM: Planning and developing a small experimental liberal arts college related to an operating small college.

WORKING PAPER: Nasson College.

GENERAL STATEMENT: The "brand-new" division at Nasson affords opportunities for in-depth exploration of its academic and non-academic planning. Because freshmen are being admitted in September it is necessary to establish a framework for the program. This framework will be presented in the form of hypotheses for investigation and possible implementation. We have only hypotheses; the operation of the division will be worked out in discussions such as this one and in the realized college.

POSSIBLE APPROACHES: We hope to develop a theory in which the ongoing college is both the experiment and the laboratory. The hypotheses will be presented as 1) the need for a focus in liberal arts education; 2) the necessity for liberal arts colleges to define "disciplines" for their own purposes; 3) the need to create or define a unique role for the college-teacher; 4) the necessity to devise alternatives to the widely accepted course-text-lecture-exam-grade-credit format; 5) the need to reevaluate our demands and expectations of students and theirs of us.

ILLUSTRATIONS: Focus on World Order: Nasson's New Division listed its reasons for such a focus as:

a) the principle of curricular selectivity.

b) a method of self and outside identification.

c) a means to a sense of community.

Provinces of Knowledge: Nasson's New Division proposes a curricular system based on seven regroupings of disciplines. The resultant is:

a) Non-distributional

b) Sequential, in terms of increasing in the level of methodoligical sophistication.

Each student's program will contain at least one complete "province" (8 term courses) at completion, and such parts of other sequences as will fill a four-course schedule for four years. The New Division states as its purpose the preparation of students for later work in a variety of special areas within one or more completed "provinces."

The Role of the Faculty: Faculty role may possibly be defined in terms of structuring and utilizing the learning situation in the students' service rather than in terms of presentation of materials, monitoring of student success, and giving rewards and punishments. The following questions must be explored:

a) Does an adequate role specification unique to the liberal arts college now exist? Are existing promotional criteria and student rating schemes based on sound assumptions as to faculty role?

b) What do college teachers do? What do they think they ought to be doing? What do students and administrators think they ought to be doing?

c) Are there role models in other fields which are partially appropriate to the liberal arts college--e.g., high school teacher and pupil, university professor-scholar and student, counselor-therapist and client, supervisor and subordinate, professional and client?

d) Of what immediate value would explicit role specification be?

The Role of the Student: The New Division at Nasson College has felt it useful to define a role for its faculty and students that is unique to the liberal arts college. The New Division's expectations of its students may be summed up as follows:

a) The college expects its students to respect all federal, state, and local laws.

b) The New Division, as an organized educational institution, requires its members to behave in ways that neither flout nor detract from the goals of education.

c) The elementary rules of civilized society will be required of all members of the division.

WORKSHOP REPORT: The workshop group felt that its most important affirmation was that a clear educational rationale must precede the design of any new college. Further, this necessity becomes especially urgent if the college calls itself "experimental."

Throughout the discussions, the workshop found the need to measure all proposed plans against such a formulation. The committee found that in the Nasson case study before it, a central and governing rationale had not been sufficiently articulated. The workshop examined a series of planning papers prepared by the New Division of Nasson. These deal with the Focus on World Order, the Provinces of Knowledge of which the curriculum will consist, the Role of the Faculty, and the Role of the Student. Reactions to these were as follows:

1. World Order. The group agreed that a "college theme" could enhance a sense of community identification at a new college, but only if it is made actual by its relationship to the college's program. Such a connection was unclear at Nasson.

2. Curriculum. Curricular innovation must also be based on accepted goals. Nasson's stated aim (to prepare for a variety of future specializations) seems inconsistent with the broad divisions of knowledge proposed. Nasson also proposes a sequential order of courses within each province (area of study), but the concept that courses can be presented in a graduated fashion without relation to content was challenged. A sequential order on the basis of content information, where appropriate, appears sound.

3. Faculty. It was agreed that a clear statement of purposes can help the small college attract teachers with a special dedication to these aims. It was agreed that it would be advantageous for prospective faculty to meet with resident students of the college prior to the decision to hire.

4. Students. The new division or college was counselled to avoid sweeping generalities in its statements concerning student conduct. Concise formulations of expectations and the "due process" to be followed in the event of violation are urged. Nasson College's New Division was seen to have an exciting chance to relate its incoming students immediately to its theme of World Order by involving them at the first moment in the formulation of the "laws" under which the newly-formed community should live.

WORKSHOP #5

PROBLEM: Developing educational opportunities for Inner-City youth. The concern will be with Inner-City youth of college age in their own education and with training college age youth to teach younger Inner-City youth.

WORKING PAPER: Monteith College and Illinois Teachers College - Chicago North.

GENERAL STATEMENT: The workshop has for its object the exploration of means for equipping Inner-City youth to participate in the prevailing culture. Our underlying assumption is that there may be differences and limitations present with Inner-City youth, due in large part to environmental background, which may be lessened by special approaches to their education. We would seek to identify and develop those approaches conducive to their liberal education.

ILLUSTRATIONS: Project Apex, New York University. Sixty young men from disadvantaged backgrounds were selected from the general curriculums at two New York City high schools for this special project. They had a two-month summer program at NYU, then a month of work and study at an NYU camp, before beginning regular college work at NYU. While attending college they lived together in a hotel recently bought for dormitory use by the university.

Their NYU program included credit courses in biology and speech and non-credit work in social science, communications, and mathematics. In the credit courses, "all students received incompletes at the end of the first term because the rate of instruction was such that about half of the content was covered in that term." For those unable to complete the work by the end of the second term there was to be summer-school instruction, possibly continuing into the next fall term.

Eight graduate assistants were hired to live with the students. They also had a half-time counsellor, but this limited professional guidance help was not adequate and further guidance was planned for the second year.

Preliminary research shows, among other things, that the group's reading grade level increased, as an average, from 7.6 at entrance in June 1965 to 11.5 in April 1966. Fifty-eight of the original sixty students were still in the Project. Intensive individual evaluations were planned at the end of the 1966 summer session.

Disadvantagement and the New Media, Illinois Teachers College Chicago-North. "To a large extent the culture we are talking about is 'disadvantaged' only because the greater society acts as if it were so." Its members might more accurately be called "culturally disfranchised."

"There is a style of life to the poor, a 'design for living' . . . The need of the ghetto dweller to cope with his environment on a day-to-day basis leads to a way of life" creating persons, says Michael Harrington, "who talk and think differently . . . It is crucial to understand what frequently follows . . . Impoverished, estranged, and disfranchised individuals are also alienated and hostile individuals . . . Negative self-images, self-hate, frustration, despair, and apathy often result in outbursts of violence."

But "a strong caveat is in order . . . we have not intended to imply any value judgments . . . there is much to be said about the positive nature of so-called disadvantaged cultures." Goodwin Watson comments on their vivid language, their realism, and their loyalty to each other; "even their pugnacity might be worth attention by some long-suffering, overworked, underpaid teachers," he comments. So we not only need to teach the disadvantaged but also to learn from them.

Another warning: in some respects one may treat the disadvantaged collectively. But in other respects it is important to note differences between various disadvantaged minority groups. Ruth Landes says, for instance, "governed by their separate heritages, Mexicans in the United States show resistance through apathy, southern Negroes through violence, Jews through organized legal recourse."

The rationale for the use of new media in educating the disadvantaged starts with the fact that television, movies, radio, records, etc., are part of their culture, shared with the "prevailing culture." Some of these media are ideally adapted to teaching non-verbal persons, often through "a direct sensory stimulus." "Textbooks are usually oriented to the prevailing culture; media, not so discursive, can more easily be oriented to the subculture." And presenting material through these media "eliminates the operating of a status differential between teacher and student."

A program is proposed "to help youth of the Inner City to achieve learning styles that will enable them to cope with the college curriculum." The emphasis will be on using the new media to help students learn how to learn--that is, to organize experiences meaningfully. This asks that their teachers "learn the modes of organizing experiences of Inner-City youth" and use this as a basis for "a constantly evolving curriculum . . . . whereby the Inner-City youth can participate in a college education without making them over in a completely different image."

Workshop Proposal for Inner-City Youth, Monteith College. ". . .There is, of course, a rapidly evolving culture of the inner city so different from that represented by university faculty members as to make communication between these and inner-city students very difficult at best and impossible at worst. This fact is the principal reason, we think, for the actual failure of most well-intentioned projects which rest upon the assumption that if inner-city youths are given the necessary money, an exhortation, and extra time, they have a good chance to succeed in a university."

"We would concentrate . . . upon what has come to be called general education . . . the indispensable foundation upon which technical and professional education must build in order to be successful . . ."

"We propose . . . to select a small number of students--perhaps twelve--from the high schools of the inner city of Detroit. They would need to have exhibited in some sense the potential to profit from an attempt to help them acquire a general education in spite of their cultural deficit . . . These students would be taught as a group separate from the main body of students of the college . . . The actual materials dealt with would be specifically selected, adapted to the minds of these special students."

"Subsequent employment of these young people should offer no problem. As they advance and gain competence they should be available for either technological or professional training on the Wayne campus, as well as elsewhere. The dean of the School of Social Work, for example, has already expressed an interest in receiving into his college such products of our proposed project as might wish to enter . . ."

WORKSHOP REPORT: The materials outline the problem and the proposals. Some questions arise. One is the verbal vs. non-verbal matter: does early deprivation create a truly different way of using language, or just different connotations and denotations for words? At any rate, in working with such young people, "the traditional symbols have not been useful." Another question has to do with possible home-college conflict; Project Apex and an experiment being carried on at Antioch both take students away from home, but neither Monteith nor Chicago-North anticipates doing so.

Chicago-North suggests that the arts may be useful in helping students with verbal deficiencies to organize their experiences, gain adequacy, communicate with others. Antioch found that time was important: the first reaction was one of feeling looked down on, "same as always," but after six months there were new insights and choices were being made about the future. Monteith stresses the need for rapport. There was general agreement that the usual curriculum is inappropriate for culturally disadvantaged students; it assumes a conceptual or vocabulary background the absence of which is one description of their disadvantage. Audio-visual media may be useful in reaching non-verbal students, but much research is needed in how to move from pictures and sounds to written words and silent verbal abstraction.

WORKSHOP #6

PROBLEM: Libraries of the future--proposals and possibilities for the small liberal-arts college.

WORKING PAPERS: Antioch College, Louis Shores, Robert T. Jordan.

GENERAL STATEMENT: The ability to make effective use of a library should be part of the equipment of every educated person. This sector of general education has usually been slighted in the past. However, with the growing emphasis on independent learning, students in a number of schools are being made increasingly responsible for their own education. Libraries of the future will need to be radically different from the ones we know if they are to meet the individual needs of students who are no longer getting their learning by group prescription.

POSSIBLE APPROACHES: Past efforts at education in the use of the library have enjoyed little student interest or institutional support. If programs of independent learning flourish, both interest and support may grow with their results. We must make ready new means, imaginatively conceived and appealing to the student, by which he may learn the use of the library.

Though independent learning programs have assumed that the teacher, freed from scheduled classroom routine, will be able to give more creative assistance to the individual student, too little has been done to ensure this result. We may need a new learning environment to foster this relationship between teacher and learner. The library of the future should set out to create such an environment.

INSTITUTIONAL IMPLICATIONS: It is hoped that representatives of institutions where independent learning is a part of the academic program as well as those coming from campuses engaged in planning a library building may be able to take home from the conference at least a few suggested courses of action that have survived close critical consideration and that give promise of improving the situations noted above.

ILLUSTRATIONS: Decentralization, Antioch College Perhaps we pay too much attention to the traditional view of the library as a place for storing and getting at books. Thanks to technology, today "the library may be thought of as a set of coordinated systems of information storage and retrieval." Such a center may be centralized, but it need not be. "It seems well within the range of existing technologies to diffuse access to information . . . throughout a campus or, for that matter, throughout any area we choose. (An urban college might operate with almost no campus.)"

Strategies for the acquisition of knowledge and skills, and strategies to create environments to "mold people . . . may conflict: a system which is highly effective in teaching certain skills and knowledge may amount to an environment which harms people in other ways." The technological environments we create"in turn, create us," and "the environment of the teaching machine and the microfilm display screen is different from the environment of the library stacks . . ."

"There is a trend towards central facilities with a niche for each student." But it may be that more diversified, less centralized learning is more salutary. "Our technologies do not require central facilities; patterns may be arranged to preserve the efficiency of the central facility while promoting a greater diversity of environments."

Generalists and Specialists, Antioch College. "Members of the professional staff of the small academic library [have] tended to consider themselves generalists able to provide good library service to almost any student or faculty member, regardless of his field." But information multiplies enormously, and more and more students do independent study with correspondingly less reliance on prepared reading lists. "In a large, well organized research library each subject field is the province of a professional" but a small library with a small staff must solve the problem in another way. "In addition to being a general practitioner, each librarian could become in some degree a specialist--a librarian of something. The size of the staff would dictate that each person's 'specialty' would have to embrace a number of disciplines, or even an entire academic area . . . Because of the relatively limited scope of most undergraduate libraries this would not need to be an overwhelmingly formidable task . . ."

"The function of general reference would be carried on by every member of the professional staff. Reference problems in depth would be referred to the staff member within whose specialty they fell."

An Independent Study Center, Antioch College. "Why classrooms as the way of learning?" Instead it is suggested that a building be erected with student offices for individual work and study. "The 'office' would be the student's. This is the place he goes to pursue his learning . . . going from his dormitory to his Independent Study Center for his learning rather than from the dormitory to the classroom and the teacher . . . The greater part of his learning activity would be scheduled to take place in the Independent Study Center" following a detailed syllabus for each course, developed "with the intent of making use of a variety of new media . . . tapes, programmed materials, audio-visual aids, manuscripts of course lectures . . ." Small seminar rooms would be provided for discussions among students.

Certain courses would need more class-and-teacher time than others. But each instructor would be asked to consider how he might best use himself, "the classroom, the students, readings and reference materials, field experiences, and the various media in achieving effective learning habits and skills of independent study." The teacher would be "one of the resources for learning; his principal role, however, is that of consultant and manager and designer of the student's learning experiences."

A faculty member at Williams College commented that the proposed Center seemed to him "too lonely and businesslike." He wished to see more provisions for group study and discussion. He also felt the proposal "accepts the rigid separation of academic pursuits from the general cultural and intellectual life of the student . . . Little provision is made . . . for the student's development in terms of emotion, conation, and intuition." And he suggested that the Center should be part of the library, not just near it, for "the newer audio-visual aids, all together, do not begin to match in content the riches enclosed in books . . . It would be the gravest of errors to separate the Center from the library even slightly, in terms of architecture or in terms of educational planning."

A Total Library Environment, Antioch College. "The reason that most librarians have so little contact with students is that they have their jobs to do," and "most librarians are just wired differently than a teacher or a counsellor." Library schools might wish to consider putting more emphasis on the development of counselling skills, etc. "But in the meantime . . . we can make our libraries more pleasant places to be, by providing . . . an atmosphere that encourages study, contemplation, and, very important, talk . . . We can also encourage a dialogue with faculty by providing permanent office space for any member of the faculty wishing to be located in the library . . . Some entire departments might find the library a congenial home."

"What I am proposing is a total library environment that provides rewards and satisfactions to everyone, and that will offer an alternative to alienation."

The Library-College Faculty, Louis Shores. ". . . The classroom as a mode of learning is a persistent holdover from ancient and medieval days when the principal medium of communication was the master's oral communication of information to his pupils . . ." But "evidence is mounting daily to underwrite the inevitable passing of the classroom contact as the measure of learning." Independent study replaces it."

"What, then, is the role of the faculty? . . . [The teacher] can begin to develop the individual mind and talent and spirit of his student in a way that was frequently denied him by the routine of class contacts. The coming of what I call the Library-College frees both the professor and the student to undertake a true liberal education together."

"In his new role the Library-College faculty member is first of all a counsellor to the individual student . . ." Second, he is "a bibliographer extraordinary" who will "out of his intimate knowledge of the literature of his subject prescribe a medium or media that will best start the youngster off running towards the common goal . . ."

"I believe library learning is the only answer to the question of how to meet the widening range of individual differences in our ambitious national commitment to universal higher education . . . Individual, student-centered, it toughens the student's mind . . . For a better higher education, for a more satisfying learning experience for your students, and for greater teaching satisfaction . . . I recommend continuous exploration of the library-learning dimension."

Libraries of the Future in the Small Liberal Arts Colleges, Robert T. Jordan. Libraries get larger as more and more of a student's learning activity is carried on in them. But learning is mediated through machines and computers and the climate is cold. Students are increasingly lonely and alienated.

"Where are the faculty? Not in the library," where they might add "a personalizing and humane element to this sea of lonely carrels." It is suggested that they might join the students in the library, as "faculty-librarians," persons interested in students and able to guide them "through the maze of the world's and the library's resources."

This could mean the faculty would be "intermediate-level librarians," as would be another group of persons carrying on most of the technical routine of the library. These two kinds of intermediate-level librarians would be under the direction of "no more than two or three all-around senior librarians, trained at graduate library schools. One will be in charge of the technical staff. Another will be the academic dean or his assistant . . . There will be no head librarian as such. Since resources and access to them are so basic a component of the learning process, the chief administrator of the learning process must be a resource expert as well as educator." Thus, "we might say that the library will expand to include the entire campus; the library staff will expand to include the faculty."

Some institutions where one may see "aspects of the integrated 'Library-College' of the future" are the University of Illinois, M.I.T., Jamestown College, Oakland Community College ("which has no classrooms and where all learning takes place in a learning center"), and Grand Valley State College.

WORKSHOP REPORT: The group was polarized on one issue. Some members were committed to the concept of the 'Library-College' as proposed in Robert Jordan's paper and by others at the conference. The remainder were for various reasons not so committed. One said that he was concerned about what he sensed as an overemphasis on the library; a college education, he said, must involve "doing, working, playing, making, experimenting," as well as the acquisition of knowledge and skills. Another said that the library-college goals, particularly the goal of teaching students to use resources for learning independently, are in fact the goals of any good college.

As a result, the group prepared a two-part report. Part I, "The College of Tomorrow," stressed the need for a college to be able to respond to demands for a variety of learning situations and materials, and suggested either a learning center, as discussed in the working paper summarized above, or "a plan for the development of diverse learning environments in various parts of the campus," as envisioned in the paper on decentralization. A number of proposals followed:

1. Organize within the Union a continuing committee on learning centers, learning environments, and/or libraries, to provide for exchange of information and engage in continuing studies and planning.

2. Secure financial support for the expansion and extension of the Library-College Newsletter.

3. Make college-wide surveys on the utilization of learning materials, present and potential.

4. Publish a handbook on the effective use of the library and the materials of learning.

5. Support investigation--now in progress--of copyright laws, as a basis for removing obstacles to the use and dissemination of learning materials.

6. Provide educational programs and fellowships for library audio-visual experts, library instructional leaders, and professors expert in the use of learning materials in the library.

Part II of the report, "The Library-College," restated and summarized many of the points in Robert Jordan's and Louis Shore's papers. "The heritage of the past is preserved primarily in its written and graphic records," the report said. "It is proposed that all teachers become expert, . . . that all students be trained in the use of these records . . ."

"Instead of regular class attendance and irregular library study," regular independent study and irregular work with teachers is proposed, the latter resulting from "felt student need that arises from the library independent study and faculty counselling."

Summarizing the Library-College:

Objective: Generally the same as in other colleges, but with increased emphasis on inquiry and on the capacity and motivation to use resources independently.

Method: A new kind of organizational pattern for learning. It proposes to organize the major portion of the student's learning activity around his work in the Independent Study Center. (Baskin)

Changed Role of Faculty: Increased stress on the teacher's role in motivation, counselling (including resource counselling), evaluation, and leadership, in contrast to classroom-texts-lectures.

Facilities: Essential that each student have a place for private study, preferably his own carrel or private office. Greater emphasis than in the ordinary college on the provision for an increased quantity and variety of resources.

Changed Role of the Library: In addition to being responsive to other aspects of the college program, in the Library-College it is suggested that the library should also take educational and community initiatives, in some cases leading, in other instances alongside, the faculty, administration, and students.

WORKSHOP #7

The Union for Research and Experimentation in Higher Education

SUMMARY REPORT: "Workshop Seven heard, discussed, and reacted to twelve different proposals for research, experimentation, or innovation in higher education. Space limitations make possible only a brief summary of these ideas. More information is available from the authors."

Roland Liebert, National Student Association, 2115 S Street, N.W., Washington, D. C. "Student contributions to educational innovation could be greatly improved if some student could experience responsible involvement in educational planning, could study differing educational techniques, and could gain insight into varied educational programs. This proposal would place a limited number of students in Union colleges for such experiences."

Sally Cassidy, Monteith College of Wayne State University, Detroit, Michigan. "Does undertaking a semester-long research project early in one's undergraduate experience have significant effect on the development of competence and independence, and on self-discovery, perceptiveness in further study, and career orientation? Implementation of such a program on several campuses would enable study of interrelationships among variables such as the nature of the problem, the characteristics of students and faculty, and the stages in the undergraduate research process."

Goodwin Watson, Newark State College, Union, New Jersey, and Samuel Baskin, UREHE, Antioch College, Yellow Springs, Ohio. "Few persons are available who are able to serve as catalysts to encourage educational change. This proposal would seek out those with potential for such work, and would offer them sensitivity training and field experiences in an experimental college, in an industrial research and development setting, and in one or more foundations which support research and experimentation in higher education. A summer seminar would conclude the year-long program."

Sister Patricia Jean Manion, Loretto Heights College, 3001 South Federal Boulevard, Denver, Colorado. "The proposal aims to identify and study the characteristics of innovators in higher education. College administrators will be surveyed for names, and innovations would be traced to their originators. The list of innovators developed would be studied through the use of autobiographical materials, self-rating scales and ratings by associates, interviews, and other instruments relevant to the assessment of creativity and personality."

Nevitt Sanford, Institute for the Study of Human Problems, Stanford University, Stanford, California. "A center for the improvement of college teaching is proposed. The center would offer a place, within a college or university, at which research on teaching and learning was going on and to which college teachers would come for experiences calculated to increase their interest in students and their awareness of themselves, their purposes, and the impact of their activities on students. Experiences such as reviewing and discussing with peers videotapes of their own teaching, observing the tapes of other teachers, and participating in research on students and how they learn, would be provided."

Stanley Newman, Illinois Teachers College Chicago-North, 5500 North St. Louis Avenue, Chicago, Illinois. "An investigation of student cultures from a holistic point of view, using student, faculty, and administration as participant observers over an extended period of time is proposed. The result would be anthropological monographs. Data collected are to be stored in an on-going data bank to permit comparative analyses."

Arthur Chickering, Project on Student Development in Small Colleges, Goddard College, Plainfield, Vermont. "This project aims to test ways to improve institutional effectiveness through experimentation based on detailed study of the characteristics of students who attend. Family background and characteristics, cultural history and traditions, educational history, intellectual abilities and interests, future plans and aspirations, attitudes, values, personality dynamics, and the nature of the home community will be studied. Faculty will examine the findings using relevant knowledge from the behavioral sciences, and develop and test the program modifications suggested."

Warren Martin, Center for the Study of Higher Education, University of California, Berkeley, California. "It is proposed that study be given to the problems and ramifications associated with the establishment of colleges of a rather more radical nature than have yet been announced. The projections thus far for new colleges seem equivocal at the point of whether the new colleges shall be radically experimental. They seem to want the comfort of security and the thrill of new adventure at the same time. But both are not available if we are to achieve university reform. It is time to press for change and it is proper to insist that the new colleges be truly distinctive."

James Trent, Center for the Study of Higher Education, University of California, Berkeley, California. "It is proposed that for a year's duration a specified number of students and faculty members from an outstanding college change places with an equal number from a more disadvantaged college in an attempt to initiate a leavening process in the latter institution. The two groups of students should be matched for age, sex, and major, and should be expected to go about their personal and professional pursuits as they would on their own campuses. It is hoped that resultant scholarly and social interaction will lead to intellectual stimulation and awareness otherwise unavailable to many individuals."

Dan Fader, The University of Michigan, Ann Arbor, Michigan. "It is proposed that funds be sought to enable faculty members to view students and how they work with them, not through the behavioral sciences, but through their own disciplines. It is also proposed that Union colleges invite public high-school and junior-high-school teachers to their campuses for a semester- or year-long association with a man in their discipline for purposes of self-renewal and refreshment."

Harold Yuker, Hofstra University, Hempstead, New York. "It is proposed that the Union publish a journal for dissemination of experiences, information, and ideas concerning innovation, experimentation, and research in higher education. It is also proposed that a study be made of the characteristics of the faculties at the Union Colleges."

Royce S. Pitkin, Goddard College, Plainfield, Vermont, and Adolph Anderson, Hofstra University, Hempstead, New York. "The Danish folk-high-school demonstrated that the new institution can be a significant force for social progress and for regional development. It is proposed that the characteristics and backgrounds of disadvantaged southern Negro and white young persons be studied and that an institution suitable to their needs, aspirations, and future potential be developed."

Panel Discussions

DIMENSIONS OF CHANGE IN HIGHER EDUCATION

The First Conference on Innovation,
held May 19-23, 1966, at Magnolia
Manor, Mass., under the auspices
of the Union for Research and
Experimentation in Higher Education.

- "Innovation: How Does it Happen?
- "The Students Speak . . ."
- "Where Do We Go from Here?"

Conference Reporter, Will Hamlin

Edited by Will Hamlin, Goddard College,
and Lawrence Porter, Antioch College

INNOVATION: HOW DOES IT HAPPEN?

President Esther Raushenbush of Sarah Lawrence College, chairman of this session, said she saw three basic sources for innovation: the man with a passion and his committed followers, the outside agency which feeds the results of its research into the academic world, and institutions themselves which slowly come to the conviction that they must be better than they are, be able to do things they have never done. The last of these she felt to be by far the most important. "We here represent a range of institutions that cannot be excused from the responsibility of creating new education," she said, in introducing the session's six speakers.

SEYMOUR SMITH, PRESIDENT, STEPHENS COLLEGE: I think Esther's done a very good job of setting the stage for us, indicating that the ordinary people in colleges and universities are the ones who can effect change. I'm going to be speaking to the rather simple problem of establishing the climate and the conditions for innovation on a college campus.

First of all, the climate is established by an institution's commitment to change, and its constant and continual renewal of that commitment. The commitment both comes from and nourishes a tradition of innovation and experimentation: expectations are developed that it is normal and natural to attempt new enterprises. It makes a difference, we think, that we invite our new staff members into an institution that has this kind of tradition.

Constructive and creative innovation ought to grow out of real need and deep understanding of the institution and of its students. What answers a need in one institution cannot simply be borrowed for another; change can be meaningful only when it is related to the needs of one's own college, the learning of one's own students.

The personnel of a college is an important factor in its climate for innovation. We need administrators who do not give lip service to experimentation but who are prepared--by conviction, by training, by experience--to evaluate the needs of the institution in such a way that the budget is appropriately allocated to innovation. It is similarly important to choose as faculty members persons who have the inner security to be able to move outside of traditional patterns and who are ready to devote at least a part of their professional time to innovative effort.

If the faculty need inner security, it may be that the institution itself needs a certain kind of insecurity if there is to be a climate for innovation. Much of the experimenting I have observed over the last half century has come out of institutions where things couldn't have been worse--you had nothing to lose! Too secure an institution, one that has found the patterns it believes to be successful, may have no reason to change. This is not to suggest that you find some way of erasing your endowment; but maybe there is something in insecurity that helps establish a kind of aggressive climate, the drive to become an institution that amounts to something.

So much for climate as a condition of change. Another condition is that the institution provide a process through which innovation happens. Leadership can come from almost anywhere--from any member of the faculty who has a creative idea. The process then involves the people who need to be involved--administrators and other faculty members, for instance--in a serious evaluation of the proposed innovation. Evaluation and planning may take several years, with every aspect of the proposal open to question.

To make such evaluation possible, I suggest a further condition--that we must have supporting services. We may need a research office, or at least some part-time members of the faculty who will do research. We will need consultation and visitation--visits to places like this where new ideas are being dealt with, and visits from consultants like you people sitting here. We need to free a faculty person to take charge of the new project and follow through its development. Perhaps that person will be the Vice-President in Charge of Heresy, or, more formally, the Director of Educational Development.

We need to make time available--time to originate ideas, to develop them, to evaluate them, to implement them. Too often we say, "Let's try something new!" and then thrust this on the faculty on top of everything else they have been doing. We must find ways of releasing time for at least a few faculty members to work on special projects, but this isn't enough. This is a problem for all of us, and none of us is doing an adequate job.

We need to reward experimentation that leads to good teaching, if we really believe in it. We don't know how to do this; we need to find out how to evaluate it and how to reward it.

Finally, innovation needs money. The institution must have some very real commitment to being and continuing to be the kind of exciting, experimenting institution we believe in. It must allocate its resources in terms of that commitment. But neither the money nor the innovations come overnight. We need much patience and a long-range perspective.

FRANK BOWLES, DIRECTOR, EDUCATION DIVISION, THE FORD FOUNDATION: I would define educational innovation as tryout of a method of producing change in an intellectual climate. I suggest that it arises mainly under three sets of conditions: as a response to an urgent need, as the result of a long-term probe for improvement, and as the result of technical facilities developing ahead of teaching methods.

First of all, a critical intellectual mass must be achieved. This is a subtle matter. The short-lived Experimental College at Wisconsin, affecting a very small student body, attained such a mass; yet there are innovations all over the country which affect more students for a longer time but never attain the critical mass. There needs to be some inner strength in the program, so that it involves people of a certain caliber.

We very much need a college which is devoted to doing in the sciences what is now being done effectively in the verbal fields. Undergraduate teaching in science does not seem to me to have changed very much in direction and intent since I entered college in 1924. Small colleges are having increasing difficulty in preparing their students for graduate study in science and mathematics, and the difficulties will continue to increase, unless we can develop a unified concept of science for undergraduate teaching.

Second, we need a college which takes as its focus the study of environment. Any one of us who looks ahead as little as thirty-five years can see very clearly the great problems of environment America will face: water shortages, air pollution--you name it. Studying these could furnish a very new, very challenging way of arranging the program of an undergraduate college, drawing on every one of the disciplines.

Third, we need any--and I underline any--viable innovation in education in the South. Innovative operations in Southern institutions have never succeeded. It's time to open up new colleges--to try Black Mountain again, for instance, perhaps on a larger scale. The time is ripe in the South for new models.

Fourth, we desperately need an answer to the problem of the big city young person, able to do good academic work, who simply has no college to go to. At present in New York City, the city colleges and the community colleges which are part of the city system are open only to the upper quarter of a high-school graduating class; for anyone else the doors are closed unless they can pay fairly high tuition. Dealing constructively with inner-city youth is only in part a matter of curriculum. As much as anything, it's the problem of making available classrooms, books, and teachers.

The fifth area in which I see a great need for innovation is the Negro colleges. Among them are some of the most conservative institutions in American education, the most resistant to change and the most in need of it.

Let me now move to some basic principles for successful innovation. First, an innovative program must be in some way intensive--as a close-knit, integrated program; as the expression of a single dominant philosophy; or through its faculty. Another way of saying this is that it must have a focus, be it the structure of the program, the books or other materials used, or the teachers. Second, it must provide group experience. One criticism of automated instruction is that it can make for a very lonely institution, and a student may well ask why he should come to college to spend his time in a carrel doing something which, with a little more engineering, he could just as easily do at home. Third, it must provide for evaluation which can be translated into conventional terms so that to some degree it can articulate with other programs and other institutions. Finally, a very obvious principle: any innovation must be self-renewing.

J. RICHARD SUCHMAN, ACTING DIRECTOR, DIVISION OF HIGHER EDUCATION RESEARCH AND DIVISION OF ELEMENTARY-SECONDARY RESEARCH, U.S. OFFICE OF EDUCATION: I'd like to address myself to innovation that is the consequence of a process of growth. I define the person who is growing professionally as one who comes to know more about what he's doing, is building and constantly rebuilding a theoretical framework about it, and is increasingly able to act on his knowledge and his theory.

The most important condition for professional growth of this kind is freedom. You must be free to experiment, to formulate, to make variations and relate what happens to your formulations. This means that you must operate in relatively low-pressure conditions. You must also have a certain freedom of resources: you must be able to lay your hands on the money, materials, and space necessary to trying out your ideas.

A second condition for growth is a responsive environment. You need feedback about what you're doing, both through a chance to examine consequences and through the opportunity to try out your ideas on other people, and to listen to and reflect on theirs.

In order to bring about the conditions of freedom and the responsive environment, it seems to me that there should be somebody in an institution who can act as a kind of catalyst. He should be a creative person himself and also a good listener, a model for the responsive environment. He should be in a position to help keep the pressure as low as possible, to encourage people to play around with ideas, to make formulations. He should be able to ask the kind of questions which will help an experimenter focus his ideas, perhaps enlarge them to incorporate other ideas. I have a feeling he should not be someone in a position of high administrative authority; it's important that he be reachable by everybody without the potential barriers of rank and status.

There are two examples of this kind of approach I'd like to give. I wanted my junior-year teacher-education students at the University of Illinois to have a chance to observe children, to try things out, to gather data, and to formulate their ideas about what children are like and what the learning process is. So in the beginning we had them sitting down with one or two children, just talking with them and watching them, with no assignment except to come back to a group of students who had been doing the same thing to see if they could make sense out of what they'd seen and heard. Then they would take their formulations back to another session with the children, come back to another group meeting, and so forth.

The professor was not the didactic authority who says what children are like and how they learn and how you teach them. Instead, he raised questions which the students could then consider as they again met with children. I felt that in this kind of program I was able to offer the students both the freedom and the responsive environment: the freedom to explore and experiment individually with children in a real-life situation, and the chance to formulate about this in a group where ideas can be exchanged back and forth. The results of this one-semester program were that we had people going into student teaching with a kind of sophistication which led them to see more in the children they were working with than their supervising teachers were able to see.

The students were not supposed to discover everything for themselves; part of the catalyst's job was to feed into the discussion various conceptual organizers. But they were very much involved in the process of inquiry, so that the conceptual organizer could be brought in at a key point--at the teachable moment.

The second example is a program we are just getting started with at the Office of Education. We want to create the conditions of freedom and the responsive environment for working school teachers. We want to make it possible for a group of school districts to organize what we call a consortium--an organization outside of the administrative hierarchy, with a staff of people playing the catalyst role. The catalysts would be free to move in and out of the schools to observe and listen to teachers and help them find ways of experimenting and exploring. They would also conduct an ongoing seminar or discussion group in which the teachers would be helped to examine their experiences and to begin to theorize about them. The teachers would carry the theories back into their classrooms to test them, bring the results back to the seminar, and so on.

Unless we can get educators at all levels to become theorists about what they're doing, we're going to lapse back into innovation for the sake of innovation. And until we bring this theoretical element into education, educators will not be professionals.

EDWARD BOOHER, PRESIDENT, McGRAW-HILL BOOK COMPANY: I am an administrator, so I am going to talk about innovation from that point of view. I think the successful administrator in an institution which innovates must first of all be an innovator himself. Second, I think he should be a first-class idea stealer, which is a crass way of saying that he needs to be aware of and be able to grab hold of things that are new and worthwhile. Third, he needs to be able to do something which is hard to describe: he must be able to encompass things, integrate and articulate the various parts of the institution over which he presides, with a sort of global and intuitive judgment.

Lest I be misunderstood, I must quickly warn you that I feel it to be very important that we not try to institutionalize innovation or creativity. In my own company we have a very small Research and Development department--essentially one man, who is a gadfly, who looks into things, and who is a very good idea stealer, I may add. But we are loaded with creative people, because we believe in having the creative work done within the operating parts of the company: we like the innovators to be part and parcel of the areas in which they work.

If you have the kind of climate for innovation Dr. Smith talked about, good people will search you out. Then you have to give them time, not put them in boxes. Let them mess around. You reward them monetarily, of course, but mainly you reward them by allowing them to do the things they believe in. So you get good people, you turn them loose, and you let them prove to you that their dedication will bear out your confidence in them.

In the matter of tenure, we in business may have an advantage over you. We are loathe to fire people, but we can move them around with a little more freedom than you probably have in most educational institutions. We can suddenly pick up a 29-year old who's just as smart as all getout, and put him over 20 people who have seniority that goes back to the Year One, because he can do something important with a division or a department.

Let me give you an example. One of our bright young men has had in his craw for five years the belief that a literary explosion was going on in Eastern Europe. Eighteen months ago, he took on a young woman editor who is completely international in her background and has a passion for good literature. Six months ago he turned her loose to go to Eastern Europe and find the best stuff she could find--and at the end of this year I hope we'll be publishing eight new books from these countries. That's the kind of thing I like to see go on.

Another example. We're dedicated to the principle that books help people. The more good books of all kinds we can get into Eastern Europe, we believe, the closer we'll come to living in a world of peace. But these are soft currency countries and don't have money to buy books. One of my associates got the idea of going to Yugoslavia and asking them to reprint our books. The books we paid for partly in dollars, which they were eager to have, and partly in kind--in copies of the books they printed for us, and which they are now distributing to the rest of Eastern Europe. Now this isn't a very big thing, but it took someone with imagination, with dedication, working in a situation where he was free to urge us to try something.

ROYCE S. PITKIN, PRESIDENT, GODDARD COLLEGE: Being something of a provincial person, I have to draw on my own experiences. I want to make a brief statement about ten cases. I made a generalization about each case, and now I'm going to reverse the order of events. I'll give you the generalization first, then the case. But let me make it clear before I begin that I'm talking about innovation, not experimentation. In my view, innovation is a lower order of animal.

One of the conditions that may bring about innovation is that an existing arrangement is unsatisfactory. When we started Goddard, we said we would let students follow their own interests; if they wanted to take six or seven courses, they might do that. One student ended up taking eleven. After a year it became clear that this arrangement was unsatisfactory, so we made an innovation: we introduced the three-course system. Now it's used by many other institutions--who never knew we had tried it, of course.

Innovation may come about through a direct suggestion from outside the college. In 1941 one of our parents suggested we should make a direct effort to enroll Negro students and offered some money for tuition adjustments. So we did, and since then we've had many Negro students.

Another factor that may bring about innovation is the introduction of an outlander on the inland scene. In 1946 we hired Thomas Yahkub to teach sociology. He was an Indian by birth and he brought with him a whole new point of view; the result was that 20 years ago we introduced the study of Oriental Cultures at Goddard.

Notice that we did not set out to do this--we set out to get a man in the field of sociology.

Innovation may occur when we recognize that one need may be met by meeting another need. We recognized that college students need to have experiences which require the discharge of adult responsibility; at the same time we recognized that the public schools in neighboring communities--and clear across the country--were greatly in need of additional manpower. So we organized the Educational Resources Project in which students take adult responsibility as assistants to overworked teachers. The schools are resources to our students, and the students are resources to the schools.

We may innovate by relating an institutional need to a program being carried on by an outside agency. At Goddard we had the need to find a more effective way of introducing students to a foreign language, and we had decided to make use of French-speaking Canada, which is only 60 miles away. About the same time the Fund for the Advancement of Education was developing a program for the utilization of resources for the improvement of teaching. Could we describe our need in terms of their program? We talked with them, made an application, got a grant, and that was the beginning of our Comparative Cultures Program.

Innovation may result when a program you've undertaken doesn't quite come off, and you have to redirect your energies. From the very beginning of the college, we've been concerned with adult education. We were particularly interested in providing liberal education for leaders in business and industry. We got a small grant from the Fund for Adult Education to carry on a two-week seminar for executives, but the idea simply did not take. John Osman told us that many colleges had had the same experience, and suggested we try something a little different--capitalizing on our experience with Canada in the Comparative Cultures Program. So we organized the Canadian-American Seminar for Management, for American businessmen with interests in Canada and Canadian businessmen with interests in the United States, a program which has been quite successful.

A situation which ought to lead to innovation is when an institution is unable to meet existing needs with its existing staff resources. Very briefly, that's how our widespread use of independent study developed. Students wanted courses in a great many areas, far more courses than our small faculty could teach. So we said to the student, define the problem you want to work on, design a way of working on it, and find a teacher who can advise you as you work. If the teacher really respects the student's independent learning, he can supervise a great many such studies.

We can innovate by extending existing schemes to new situations, combining apparently unrelated ideas. Our Adult Degree Program is a case in point. We combined what we had learned about supervising independent study with what we had learned about residential adult education and created a program in which adults come to campus for two-week seminars on big problems or issues, plan independent study with members of the faculty, and carry it on at home for six months, keeping in touch by mail or telephone or sometimes tape recordings. This program, which has been one of the most successful of our innovations, was turned down by two foundations when we asked for help in getting it started.

It seems to me that innovation is most likely to occur when there is a continuing discussion of problems by as many persons as possible within an institution, stimulated by a person whose primary concern is developing hypotheses and theories. George Beecher holds that position at our college, and it was as a result of years of conversation with him that a number of us were able to develop what we came to call the Experiment in Curriculum Organization. I will not describe it beyond saying that it meant an overall change in many of the things that we had been doing at the college; but I must say that the fact that we could plan it and carry it out, and get support from the Ford Foundation in doing so, is due to our having gone through this discussion process.

The last condition for innovation I want to mention is the simultaneous recognition of a need by several persons. This is how the Union for Research and Experimentation in Higher Education came about. Some of us had felt for a long time the need to be in closer touch with persons in other institutions concerned with educational experimentation. We had proposed this from time to time, but it never seemed to go. Then in 1963 we held a conference at Goddard on the impact of the experimental college--and the people there simultaneously recognized the need for having an organization which would facilitate communication and stimulation among the experimental colleges--the result of which is that here we are.

RALPH TYLER, DIRECTOR, CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES: There are four aspects of innovation which it seems to me are most commonly stumbling blocks, and most likely to be overlooked.

One of them is providing whatever is necessary to carry out a planned program: such things as further education and training for personnel, equipment and materials, or the development of new relations with the educational system or the larger communicy.

Some of you will remember the Eight-Year Study, which made it possible for some thirty schools to try out new high-school programs unhampered by the need to fit into college-entrance subject-matter requirements. By the third year of the Study it was clear that many schools were having trouble with their ambitious plans because the teachers were not able to implement them. So we organized what we first called institutes but then called "workshops" for summer meetings which provided teachers an opportunity to prepare for the kinds of innovation being undertaken in their schools. Whether or not the workshops played an important part, it was very clear that after 1936, when the first one was held, the schools were moving ahead much more effectively than they had previously.

Summer workshops were also important in the Cooperative Study of General Education. In addition, we provided that a liaison officer from each of the 22 colleges involved could spend six months or a year at the University of Chicago, where I was at the time, getting whatever training he needed. Paul Dressel was one of those liaison people, coming from Michigan State University to study evaluation procedures; and I remember the liaison officer from Mills College was Dean Rusk--two persons among others who had that opportunity for more intensive training.

In the Eight-Year Study we found a need to work on materials and equipment, and set up our Commission on Curriculum. Many of you may be familiar with the books on science and general education, social studies and general education, language and general education, literature, and so forth which came out of this work and became materials for carrying on various innovative programs.

The second common stumbling block in my opinion is the failure to move from what has been called "messing around"--which is important--to a more systematic experimental attitude and method. The need is for an approach that involves periodic reclarification of objectives, the redesigning of means to attain them in the light of new experiences, and checking on the extent to which the means are actually being implemented as well as on the degree to which the objectives are attained.

I came to realize the importance of checking on implementation 25 years ago when I was part of a group asked to evaluate activity programs in some New York City elementary schools. Visiting classrooms, we discovered that we could not compare activity-program schools with control schools, for the implementation of the program varied enormously from room to room; instead, we had to compare rooms where the program was being implemented with rooms where it was not.

A third stumbling block is turning an experimental program into a new orthodoxy. Continual modification of a program in the light of experience with it seems necessary if it is not to become as rigid and as lacking in vitality as the procedures it replaced. Ends and means both need continual examination.

The last stumbling block I want to mention has to do with keeping the experiment going, once the first flush of enthusiasm is over. Three things seem to me to have proven useful. One is to provide relevant evaluation that gives security and confidence to the staff and students involved. The second is to reward these people, not only the staff but the students, who tend to be very conformist and to need support for doing something different. Finally, it's important that we build positive relations to the educational system of which the college is a part--to help the participants have some sense that they belong to the larger intellectual community. They must not perceive the experiment as a dead-end with no applicability outside their own institution. Such perceptions can give faculty the feeling that they are no longer able to move out, to get into other positions, and it may make students feel that their work, however important to them and their college, will not be recognized elsewhere.

THE STUDENTS SPEAK ABOUT EXPERIMENTATION

Colleges at the conference were represented by students as well as by administrators and teachers. At one session the students spoke about their roles in their respective colleges, stressing their need to feel that education is an activity being carried on with them and about them, not something being done to them or a faculty enterprise to which they are a necessary evil. Milton Schwebel, Assistant Dean for Instruction at New York University's School of Education, was chairman of the session.

DR. SCHWEBEL: A long time ago a group of young men, concerned about the human condition, hired themselves some teachers. This was the beginning of the University of Paris. A lot of things have happened since that time to help us forget that the genesis of higher education was the student's need to learn, and that students ought to have a hand in making educational policy simply because it makes education more effective. Six students will tell us how they believe student involvement in policy making can improve education.

ANTIOCH STUDENT: At our initial meeting we decided we are all pretty much 'safe' students, so you must take our ability to be representative of student views with that qualification in mind.

I think the student's right to be represented in policy making is increasingly accepted at many colleges. But I think his ability to contribute is much less accepted. It founders on the rock of expertise. Students are admittedly inexpert, but they do have real contributions to make in at least two areas. One is in fresh ideas, which may come just as well from an obnoxious first-year student as from an encrusted thirty-year bureaucrat or professor. The second, perhaps the more crucial, is in perspective. If the perspective of students has been included from the outset in the planning of an innovation, they will not have to be sold on it; instead, they'll be selling it to the other students.

I think it was in 1926 that Antioch students first asked to be on policy-making committees. By 1940 they had won most of their victories, and today they're generally represented in a ratio of one student to two faculty members. For instance, there are three students and seven faculty members on the administrative council. I think this helps make for a high level of discussion: faculty members do not want to embarrass themselves in front of students, and the civility of the meetings is in contrast to what we hear of faculty meetings where students are not present. We make some real contributions, too, as other students certainly have on faculty screening committees, building committees, and departmental review committees.

A major example of the importance of the student role at Antioch is the new first-year program, originally suggested in a student paper and planned in two years of student-faculty workshops and committees. The result is a daring an innovative program directly relevant to student needs.

I think this is the way students would prefer to work for a better educational system--being included on committees, not because they have a moral right to be and not because someone thinks it would be nice to include them, but because of the real contributions they have to make. Through their participation, students come to have a better concept of how they are learning and why they are learning; at the same time, they help the administration and faculty to get a broader perspective so that the plans they make are acceptable to the widest number of people.

SARAH LAWRENCE STUDENT: I've been working for three years on the student curriculum committee which meets regularly with the faculty curriculum committee and the dean and occasionally with the president. We make a continuing evaluation of teaching and curriculum, asking the opinion of every student, and I think we have had a very real say in curriculum changes. Student activities are the responsibility of a joint committee, made up of faculty, students, and administration, with a student chairman; among other things this last year it organized a lecture series on Asia and a week-end conference on Red China.

There is one problem at Sarah Lawrence that results from this recognition of the student voice. The curriculum committee and the joint committee and the student council, for instance, are now institutions, and there are those who feel that an institutionalized student voice speaks for only a small number of students, about a limited number of things. One answer to this has been to establish a forum, a weekly meeting in which students and faculty can communicate with each other in house groups.

A school like Sarah Lawrence, built on individual education, has to keep finding new ways to be open to what students have to say. We have to make new institutions, and we must not be afraid of breaking down old ones when they have outlived their usefulness.

STUDENT FROM ILLINOIS TEACHERS COLLEGE, CHICAGO-NORTH showed a short film pointing out that all too often teachers pay no attention to the important things students do by and for themselves, but judge them on the basis of whether they do what the teachers think they should do. Within such a structure, how often does real learning--initiated and carried out by students in response to their own living experience--go unrecognized and unassisted?

STUDENT FROM NASSON COLLEGE: Nasson is not an experimental college and the education I've received there over the past four years has been of a most traditional form, compared with that of Antioch or Sarah Lawrence. But we do have a new experimental unit opening this fall.

It's interesting to note that no students were requested to help in planning this new division, although plans call for much student participation in planning and carrying out its academic policies and decisions. In the present or old division at Nasson the student voice is expressed through a student government, quite separate from the administration and the trustees and the faculty, but never in areas involving academic affairs.

We have been doing some planning, and will continue it this fall, to give us representation in decisions and policy making. Two or three years ago our students might not have been capable of assuming such responsibilities, but we have changed radically since our accreditation. With the advent of the new division and our proven capabilities, our lack of representation will be remedied in the near future.

STUDENT FROM SAN FRANCISCO STATE: I'm the student body president, and I've been coordinator of the experimental college at San Francisco State.

The experimental college exists within this 16,000 student commuter college. We are kind of analogous to a free university in that students have come to create an institution, but we are within, not without, an established institution. I think we've taken a step beyond Staunton Lynd's notion of parallel institutions: we wanted to avoid a polarized relationship which can so easily become a very hostile one; instead, we wanted to influence the atmosphere, the intellectual context, and the actual practical expressions of the institution we were parallel to. We think that students can be a real force for innovation; this is the first of our philosophical notions.

The second is that instead of having professors teach students, we should have students teaching other students, with the professor playing a catalytic or facilitating role. This helps cut across the stifling authority relationships that often get set up in standard classrooms. It also works as a spur to motivation among students--if they are working to create the climate of education and choosing the courses they want to study within that climate, they wind up much more interested in what they're doing. Finally, there's the old saw that you don't really know a subject until you've taught it.

Our third philosophical notion is that you can't really learn something unless you are involved in the context in which the intellectual activity is going on. So we've had quite an extensive community involvement program going, and also a number of students have been out working in ghetto areas, tutoring.

What the experimental college has done is to organize 22 different courses and seminars, each with a student organizer who has worked with a group of students to come up with the conception of the course. 400 students have been involved, and we've had a student staff of 25. We've worked quite closely with a fairly large group of faculty, 30 in direct relationship with us. Sixty-six of the students have gotten regular academic credit for their work in the experimental college, 17 of them in a general education program organized by students who then went out and got four instructors to teach it.

We've made something of an impact on San Francisco State. For example, for six years they had a moratorium on experimentation in general education. We have effectively cracked that moratorium. Second, the faculty have lifted the requirement for a one-year planning-and-waiting period for new courses; now any group of students and a faculty member can create a course on an experimental basis and get it immediately into the schedule. Finally, the campaign for student-body president brought out 700 more students to vote than had ever voted in the election before, in an election in which real issues were faced. The sense of involvement and participation by students in making decisions about their own activities was much greater than it has ever been before. There is a feeling on the campus that students can actually participate in the education they are receiving--that their thinking about that education can have some real meaning.

I would like to propose to the Union colleges that they can get a very real benefit out of seeing students come to participate with them in the process of attempting to innovate and change institutions of higher learning in this country.

STUDENT FROM MONTEITH COLLEGE: Maybe faculty and administration tend to take themselves too seriously in terms of what they think they're doing for students. Usually we can get our education without you, even though many of us have been brainwashed to think that that's not the case. But let's pretend just for the time being that we do indeed want to have some kind of community of scholars. What is the most effective way of bringing it about?

The extent to which teachers can innovate and create is related to the extent to which they encourage students to innovate and create. The really good teacher is the one who's learning from his students and maybe even letting the students in on that fact.

At Monteith, as at San Francisco State, the student is put into the position of both learner and teacher; he is in a position to suggest, plan, execute, carry out, grade, evaluate, and get credit for seminars. It's interesting that two state institutions should come to that style, to recognize that it's not 180 credit hours that the diploma stands for, but a certain kind of experience.

Classes carried on in this style are characterized by the open and dynamic confrontation that takes place in coffee houses and bull sessions--but in a more serious situation. This cooperative self-education, as we call it at Monteith, involves people coming into the classroom and saying what's wrong, how do we figure out what the problem is, how do we use resources to find possible answers, how do we criticize them, come up with our own, and test them--and doing this in any substantive field.

It seems to me that the Union might set up conferences where many students from many institutions can meet with faculty for some simple, clear student-teacher and student-student discussion about what education is supposed to be like. It doesn't necessarily involve a lot of research money; maybe all we need is bus fare and 100 reams of paper and a second-hand mimeograph machine to begin to communicate with each other about these ideas.

GENERAL DISCUSSION: Is there danger in letting a student plan his whole curriculum, do just what he wants to? A good case may be made for his having real options about contracting out of a particular institution and going to another one; but that implies that there is some kind of structure to take or leave - open, of course, to criticism, modification, change, flexibility. On the other hand, we need not necessarily think in terms of these extremes; there is a continuum between a prescribed curriculum and a student doing 'anything he wants to.' In the new Antioch first-year program the student may choose, but the choice is made in the context of a dialogue between the student and his faculty Preceptor.

Students-teaching-other-students goes on in many institutions--lab assistants do a lot of informal teaching, and advanced students often grade papers and discuss them with students, or run small discussion groups. The student teacher, however, may mirror the faults of the professor, as the 'free university' may mirror the rigidities of the institution from which it broke away. The question has to be about the quality of instruction, not about who is doing it.

What are students in college for? If the needs go unstated, it is difficult for faculty members to meet student needs. Many students, said one, were in college to find out why they were in college. Another student said, "for us to sit here and give you what we want out of education would be a very cheap way for you to find out. . .what we're trying to suggest is a process by which you can go back to your campuses and tune in and get a constant feedback on what we want." A third commented that "all the nice pretty little things you put in the essay you send in with the college application aren't necessarily true."

The notion of 'community' at Antioch, Bard, Goddard, and Sarah Lawrence, protested one dean, has come to mean domination of the college by students on matters of importance which properly should be in the hands of the faculty or administration officers. The role of students, was one response, is not to dictate decisions, but to inject into their making a different perspective.

One faculty member spoke of campus anarchists--"not those anarchists who want to individualize order but those anarchists who are just out for blood, who want to bring the system down and seek to embarrass it in any way and all ways possible." This makes it necessary, he said, to point out repeatedly the institution's concern for standards and for community, with the understanding that without standards no community is possible. We must, he added, be on guard against those minorities of teachers and students who assume that they and they alone have the answer. But this carries with it the warning that we must be careful not to "phase the radicals out." Instead, "a very difficult process must be carried on, to find a way to see that the radicals and the society remain in tension in such a way as to produce motion, not stasis."

Don't experiment on us, pleaded one student. "We're not guinea pigs there for your projects. If your experiment ignores the students who are in the process of getting an education at the time you start something, the experiment can't yield anything very valuable."

WHERE DO WE GO FROM HERE?

At the concluding panel discussion, representatives from each of the workshop groups made some comments about the workshops and then opened a discussion which ranged widely over the matters brought up at earlier sessions. Parts of the discussion are presented here in abstract form, with no attempt to indicate the dialogue out of which particular statements arose.

ITEM: Isn't there perhaps a false analogy made between what goes on in a classroom and what a student in that classroom may later become? Specifically, "independent study" isn't likely to produce an independent person if there is little or no independence in the non-classroom aspects of the student's life. "The person who is coming to your college is a very integrated being, and you can't innovate part of him and not innovate the other parts and come out with anything . . ."

ITEM: The big question you face with inner city youth--and with many young people, perhaps all--isn't the question of how to help them overcome their inadequacy in skills; it's the existentialist question of who they think they are and what kind of a world they think they live in and how they think they're going to get anywhere in it. To work on that question in a college demands a much more profound and inclusive remedial education than is involved in improving academic skills.

ITEM: What "I heard" at the conference is important because it's that we will take away with us. "I heard" few holistic designs reported. Goodwin Watson emphasized that having such a holistic design was essential, or at least highly desirable. It would appear to me that instead of such charters of commitment there is a degree of experimentation for the sake of experimentation. There are, of course, notable exceptions to this statement.

ITEM: I'm concerned that the Union seems to have in it some schools that are highly volatile, experimental, and open to change, and others which may have been so at one time but have now settled on a certain pattern and aren't really willing to listen to any alternative to that pattern. Perhaps we should start a union of schools which are all dedicated to a periodic renewal--a re-thinking from the ground up, when everything the school does has to be reconsidered in relation to everything else. Let us say we have ten colleges in such a union: each year nine of them would assist in such a total reevaluation of the tenth. The next year it would be another school's turn, and so on.

ITEM: Quite often in our discussion we fall off the cliff of knowledge into the sea of speculation.

We don't know how much principles about innovation can be generalized. Perhaps we can only deal with a specific problem in a specific place. As experts we may have all sorts of creative ideas, but that's not enough--they have to be procreative, too, they have to bring something to birth somewhere. We need research on a lot of this--the concept of the critical mass, for instance, or the elusive question of campus culture.

ITEM: We need more scientific rigor in our experimenting. Most of us don't use control groups; we don't verify our results; we don't do anything that a decent experimenter would do. If we followed our students for twenty or twenty-five or thirty years to see what they turned into, for instance, we might have to rethink everything we're doing. It's a real tragedy that we don't. We talk about what we do to these students, but we really don't know. For all we know, we may be damaging them.

ITEM: Experimentation is a difficult problem. Students don't want to be treated like mice in a Skinner box by teachers who don't know what the outcomes of their experiments may be. Yet, it was pointed out, "the minute you emerge from the womb you are subjected to experimentation--to influences of one kind or another. You don't run any great risk in trying to do better."

ITEM: One of the points on which we're vulnerable is our isolation. No institution has the right to be sovereign in our time; that's not a viable option. We have to interrelate what we are doing with what others are doing, with the system of higher education, with some other part of society. Only when we can put information about our innovations through an interconnected system can we get confidence about them.

ITEM: It's often easier to go on with what we have been doing than to do something new, particularly when the new and needed things seem very hard indeed. Take the notion of creating an inner city college. We speak of going to live and share the life in the inner city so we will really know the culture and the kids and bring whatever potential we have into the situation. Do any of us here think we really would do it? We must be aware of the resistances in ourselves--we say they won't change, they're set in their ways, they're too satisfied with *them*selves. Perhaps what we need to say is that *we're too* satisfied with *our*selves, too complacent, unwilling to do some of the things we know are needed.

ITEM: A college can be defined in many ways. Let's try to define it as a change agent, a center for disturbance, a place for involvement--not as a transmitter of the cultural heritage.

ITEM: The Union may have discovered a role for itself at this conference as a kind of neutral ground where people can expose themselves without risk (saying just the sort of things being said in this session) to test out how much they want to move and how much support they get for moving.

ITEM: The question right now is if any student will be better off because we have met these four days. The answer is in doubt for a number of reasons. One of them is that we don't know very much about students. Against what are we going to measure the impact of a conference like this?

ITEM: The general problem here, to put it very gently, is one of involving the faculty in the process of education. That's going to take a long time to do. Experiments, gimmickry, new architecture are no substitutes for this.

CONCLUSION: Innovation represents a particular mix between new insights we have, substantial courage we hope to develop, and realistic relationships we hope to sustain. I'm not sure on which point we flounder most. I think maybe it's our lack of courage--our problem is to have the courage to confront and with some good judgment to act. This has been a disturbing four days, which I think is the greatest kind of compliment. I only wonder, am I courageous enough to disturb others?